

INTERGENERATIONAL SOLIDARITY AND PLANS FOR CARE
IN LATER LIFE FAMILIES

By

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Abstract of Dissertation Presented to the Graduate School
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This study investigates how factors, derived from the theory of family solidarity, influence the plans that older parents have for care in later life. The theory proposes several dimensions that are crucial to intergenerational solidarity in later life families. In this study, these are (1) the intergenerational exchange of aid that older parents experience (functional solidarity); (2) frequency of contact between older parents and their adult children (associational solidarity); (3) the affective sentiments that older parents attach to their relations with children (affectional solidarity); (4) older parents' filial responsibility expectations (normative solidarity); and (5) older parents' opportunity structures for interaction through family size, parental health, and proximity to children (structural solidarity). A third component is added to functional solidarity as the major outcome of

family solidarity. This element is termed plans for care and is defined as older parents' expectations for assistance or caregiving from children, in the event of illness or infirmity. A number of sociodemographic characteristics, such as age, gender, race, marital status, area of residence, income, and education are also included.

A model is developed regarding direct and indirect effects of these dimensions of family solidarity upon older parents' plans for care. The data used to test the model are collected from a sample of 362 Kansas parents, aged 65 and older. Scales are developed to measure associational, affectional, and normative solidarity using factor analysis where necessary. Statistical analyses also include correlations and path analyses.

Contrary to our hypotheses, intergenerational exchanges of aid have no effects on older parents' plans for care. However, normative solidarity, being employed, associational solidarity, and family size have direct and positive effects on plans for care. Proximity to the focal child indirectly affects older parents' plans for care through associational solidarity. Relationships between other predictor variables in the model and the intergenerational exchange of aid are also discussed. The study concludes that both proximity and associational solidarity are key elements in family solidarity and that older parents' plans for care are independent from other forms of functional solidarity but,

nonetheless, contribute to solidarity in later life families.

CHAPTER 1 INTRODUCTION

Two of the most researched areas in recent years in family sociology and social gerontology have been the nature of intergenerational relations in later life families and family caregiving. Changes in demographic trends and public policy in the United States certainly justify concern about these issues as questions are raised about the willingness and competency of family caregivers and the effects of these matters on intergenerational relations in an increasingly complex medical and social world. Typically in the social science literature, four interrelated concerns about these areas receive the most emphasis: (1) increased proportions and numbers of elders, especially those over the age of 85, and how these elders will be cared for if needed in their later years (Lee, 1987; Mancini & Blieszner, 1989; O'Bryant, 1988; Shanas, 1979; Stoller, 1983); (2) stabilized birth rates (number of births per 1,000 population) and decreased fertility rates (number of births per 1,000 women age 15-44) and the effects of these trends on family relations and the availability of caregivers relative to impaired elders (Sussman, 1991; Soldo & Agree, 1988); (3) increased numbers of women participating in the labor force and the

willingness of these women to continue to provide the majority of care to elderly parents (Lang & Brody, 1983; Stoller, 1983); and (4) a rediscovery of families as less expensive alternatives to government-supported social and health care programs by policymakers concerned with the rising costs of these programs (Glazer, 1990; Abel, 1991; Stoller, 1983; Sussman, 1991).

Each of these circumstances is having, and will have in the future, a tremendous impact on elders and their intergenerational relationships as greater proportions of our population enter old age due to a continued increase in life expectancy (Lee, 1987). Likely to be affected are issues related to the provision of formal and informal caregiving to elders, as well as the more pragmatic concerns of family policymakers, practitioners, educators, and health care professionals for older persons. Family stress is also likely to intensify as the numbers of elderly family members continue to increase, unless government and private sector groups provide adequate and accessible support for families (Mancini & Simon, 1984). Such programs as work-related family leave policies; increased Medicare and Medicaid benefits for home health care and respite services; and housing and nursing home environments that meet the specific physical, economic, and social needs of elderly populations and their families are all areas where attention needs to be focused.

Further complicating these outside influences on family relations are more internal concerns, such as the amounts and types of care that adult children provide to aging parents, the amounts and types of stress and burden that these children experience, and reciprocity in family exchanges of support. These issues are frequently examined in the family sociology and social gerontology fields; however, as Mancini and Simon (1984) point out, while much of the research interest in these fields is on actual support patterns, there is much less attention paid to the support expectations of elderly family members. The main objective of this study is to focus on that area of family relations.

One segment of support expectations that has received some attention is that of "filial responsibility expectations" or an older parent's beliefs about the obligations that adult children have toward them (Seelbach, 1977, 1978; Seelbach & Sauer, 1977). Conceptually, filial responsibility expectations refer to a more generalized, universalistic notion of what persons feel that "adult children" should do for "elderly parents" than to support expectations that individuals have for their own children (Lee et al., 1994a).

Another part of support expectations might be the particular expectations for support or care that elders have in the event that they were to become ill or infirm.

Blieszner and Mancini (1987) address these more specific expectations for assistance, such as emergency situations. Adult children are viewed by older parents as occupying pivotal roles in the provision of aid, assistance, and support to them in these extreme situations (Blieszner & Mancini, 1987; Seelbach, 1978), yet this is not a topic that is discussed between them with any regularity, substance, or ease (Blieszner & Mancini, 1987). While older parents express the desire to maintain their independence and to not be a burden to their children, and are concerned about their ability to find affordable and suitable forms of care on their own, most hope that if they are ever in an extreme situation, they could turn to their children for help. However, they find it difficult to talk about these important issues with their children (Blieszner & Mancini, 1987).

A crucial concern, not only for the well-being of elderly parents, but also for the well-being of the family as a whole, is the question of whom elders think or expect will provide care to them, if they should need it in the future. Elderly parents need to be helped in maintaining their dignity and need for independence as long as possible. However, attention also needs to be paid to their expectations and plans for care, if they need it, so that appropriate outside supports are in place and provided to family caregivers, benefitting both the elders and their

family members. If an elder's expectations for care are not able to be met, perhaps because available adult children live great distances from their parents or because family relations are poor, then alternative arrangements need to be developed.

Further, this lack of attention to the plans for care, of older parents for aid and assistance from their adult children has left us with insufficient or no information as to the factors associated with such expectations or plans. While we have investigated variations in universalistic notions of filial responsibility expectations, through such situations as financial assistance and living arrangements, it is not unreasonable to suspect that older parents will have varying hypothetical plans for care, depending upon the seriousness of the situation or their own particularistic circumstances. For example, given an elder's desire for independence, planning to live with an adult child because of frailty may not be an option because it is demeaning to the elder or not practical because the elder's children do not live nearby. Thus, the elder may have expectations of moving to a planned elderly housing project or congregate living facility, when needed, and these plans may be less humiliating or more sensible for the elder. Older parents may feel that it is appropriate to ask an adult child to take them to a doctor's appointment, but improper for an adult child to provide them help with tasks of daily living.

These elders may decide that hiring a home care aide, if they should need such help, would be more suitable for them. Or the anticipated plans for care that older adults have may be related to current exchange patterns of intergenerational aid. That is, the amount of support (financial, emotional, and so on) that older parents presently receive from or give to their children could certainly influence the plans that these elders have for care in the future. If there is not much exchange of intergenerational assistance at present (perhaps because of bad family relations or the inadequate financial circumstances of the children), older parents may envision a time when they would need to plan for help from non-family members or more formal caregiving services rather than their children.

Thus, it is evident that differences in plans for care need to be examined across varying circumstances and situations. And, until we have a more complete understanding of the place of elders' plans for care in caregiving outcomes, we will be unable to thoroughly investigate all aspects of family solidarity and, on a more practical level, to understand how family solidarity can influence service provision to elders, the services that are desired and essential to assure the well-being of all elders, and the recommendations necessary to be made to policymakers with regard to these services and the

importance of the family in making caregiving decisions for older adults.

While much of what has been discussed thus far is highly speculative, there are two separate literatures which indirectly relate to, and may inform, these issues of intergenerational support and which examine common beliefs and practices regarding family relations. The first addresses intergenerational relations. The second pertains to older persons as one of the primary recipients of intergenerational exchanges, aid, and caregiving (Treas & Bengtson, 1987). Each of these issues will be addressed below.

Intergenerational Relations

Much of the sociological and gerontological interest in intergenerational relations has concerned whether, in industrialized societies, elders are alienated from their families, as well as the interrelated notion of the "isolated" nuclear family and its effects on familial relationships (Stoller, 1983; Mancini & Blieszner, 1989; Parsons & Bales, 1955). While it is true that most elders live independently from their offspring, this does not mean that familial interactions are nonexistent (Treas & Bengtson, 1987) or that, because of geographical mobility in our society today, family members live great distances from each other. In fact, existing survey data reveal that there

is a high degree of interaction in the form of telephoning and visiting between older parents and their adult children (Aldous, 1987; Rossi & Rossi, 1990) and proximate living among family members (Crimmins & Ingegneri, 1990).

It is also generally accepted in the social science literature that families provide between 70 and 80 percent of long-term care to aging family members (Stone et. al, 1987; Abel, 1991). As Stoller (1983) suggests, this points out the strength of familial ties, the importance of family members in caring for frail elders, and the reluctance of family members to resort to institutionalization of elders. These findings may well pertain to the plans that elderly parents have for care, if they need it in the future.

On the other hand, it is estimated that only about 10 to 13 percent of noninstitutionalized elders are actually impaired and frail enough to require home-care assistance at any one time (Shanas, 1974; Stoller, 1983; Stone et al., 1987; Bumpass, 1990). Thus, this body of literature finds that the vast majority of elders are healthy and wealthy enough to maintain their normatively valued independent living. These findings suggest that, on the whole, well-educated, financially secure, and healthy elderly parents are satisfied with routine interactions with their children and expect help from them only under extreme circumstances, such as deteriorating health or physical impairments

(Blieszner & Mancini, 1987; Mancini & Blieszner, 1989; Seelbach, 1978; Mancini & Simon, 1984).

While much variation does exist in intergenerational relations (Lee, 1985), contrary to popular myths and beliefs about close family members, intergenerational bonding such as that between parents and their children, on the whole, seems to be firmly entrenched.

Intergenerational Exchanges, Aid, and Caregiving

The giving and receiving of aid and assistance among family members is a key aspect of the interdependence among family members (Hancock et al., 1988). The nature of this aid and assistance seems to vary by family position; that is, whether one is a parent or a child. The help that parents give to their adult children tends to be more instrumental (i.e., financial, advice, babysitting) while the assistance that adult children give to parents, while also being instrumental, tends to be of a more personal nature, in the form of caregiving (Rossi & Rossi, 1990). It has been fairly well established in the caregiving literature that the family is the principal provider of aid, assistance, support, or caregiving to its elderly members. For elders who are married, the spouse is the "first line" of support (Shanas, 1979; Stoller, 1983; Treas & Bengtson, 1987; Coward et al., 1992). When a spouse is unavailable, adult children, especially daughters, are the ones who

primarily provide assistance to an elderly parent (Stoller, 1983; Abel, 1991).

In an innovative study of intergenerational aid and caregiving, Walker and Pratt (1991) argue that our conceptualizations of the exchange of aid between family members, especially that given to older parents by their adult children, need to be expanded; that is, giving assistance to family members is a fairly established pattern in family relations and caregiving should be viewed as an escalation or a continuum of those already existing patterns of intergenerational aid-giving. This notion, however, has not been tested to our knowledge within the realm of family relations nor has it been extended into the particularistic area of elderly parents' plans for care. This could be accomplished by asking elderly parents about their familial relations, any assistance they give to and receive from family members, and whom they would expect to help them under varying circumstances, if they should need it. It may be that high levels of intergenerational support exchange will result in an increased likelihood of a parent choosing an adult child for help, if and when needed.

The exchange of money, goods, and services is fundamental to and interrelated with intergenerational relations. However, because of the increased complexity of our modern social world, there seem to be implicit obligations for family members to help each other in times

of need, as well as explicit commitments that may prevent assistance from being forthcoming, such as distance from an elderly parent, employment of the adult child, or unpleasant relations between a parent and a child (Allan, 1988; Abel, 1991; Hamon, 1992; Rossi & Rossi, 1990). These exchange elements are germane to and may be extended into the issue of elderly parents' plans for care.

Synthesis of the Two Literatures

This study will focus on intergenerational aspects of exchange, assistance, and plans for care and their place in family relations from the point of view of elderly parents. This will necessitate (1) an attempt at synthesizing the information from the theoretical and empirical literatures on family relations and intergenerational exchanges of aid; (2) developing an innovative model to explain associations between an elderly parent's family relations and the exchange dynamics and plans for care in those relations; and (3) formally testing the new model.

Theory development and expansion are crucial parts of scientific inquiry and, beyond descriptions of social phenomena, provide testable explanations for why social events occur. The giving and receiving of aid between generations have long been thought to be key elements that particularly hold family groups together, strengthening the bonds of solidarity or sense of 'we-ness,' in relationships

with people (Roberts et al., 1991; Rossi & Rossi, 1990; Scanlon & Marsiglio, 1993).

These notions of familial solidarity, mutual dependence, and exchange have been linked in a theory of family solidarity in order to explain the variation in these aspects of family relations. This theory comes out of a long sociological tradition of study in the exchange of money, goods, and services between groups, group cohesiveness, and solidarity in small groups. The theory itself has been developed and modified by Bengtson, Olander, and Haddad (1976) and their colleagues (e.g., Bengtson & Roberts, 1991; Bengtson & Schrader, 1982; Mangen et al., 1988; Roberts & Bengtson, 1990) and tested by such researchers as Atkinson, Kivett, and Campbell (1986).

While a complete explanation of the theory of family solidarity goes beyond the scope of this chapter, in its most basic and current form, the theory postulates that intergenerational family solidarity between aging parents and their adult children is a multidimensional construct composed of the independent elements of (1) generational consensus (or agreement), (2) intergenerational association (or contact), and (3) affection (or emotional attachment) (Bengtson & Roberts, 1991; Roberts & Bengtson, 1990). These elements of family solidarity are said to be affected either directly or indirectly by (4) functional (or exchange), (5) normative (or norms of filial obligation), and (6)

structural (or opportunity structure for interaction) solidarities (Bengtson & Roberts, 1991).

Statement of the Problem

The purpose of this study will be to examine, with a sample of elderly parents, how and in what ways family structure (structural solidarity), norms of filial obligations (normative solidarity), perceived affection between parents and their adult children (affectional solidarity), and intergenerational contact (associational solidarity) influence intergenerational exchanges of aid and older parents perceptions of whom would assist them in times of need (functional solidarity).

The use of this theory will allow us to address several issues and to expand the theory into other areas of family relations, such as family caregiving. In order to demonstrate how the two literatures on intergenerational relations and exchange of aid are connected, we must expand or extend currently existing definitions of functional solidarity in the theory of family solidarity. We conceptualize three dimensions to functional solidarity: the (1) the giving and (2) receiving of intergenerational aid, which are the exchange elements of functional solidarity, and over and above the exchange, (3) the plans that elders have for care should they become ill or infirm. We envision that an older parent's plans for care from children will tap

into the issue of the particularistic situations of elderly parents and their plans for care, if needed, rather than relying on more universalistic concepts of filial responsibility expectations. That is, we differentiate generalized norms of filial responsibility from anticipated aid or, as we term it, plans for care. Based on current patterns of exchange, we expect that the intergenerational assistance that older parents and their children experience in the present should inform their future exchanges.

This study will make several contributions to the extant literature on family relations and family caregiving. First, we will be able to determine if current conceptualizations of functional solidarity sufficiently capture the complexity of intergenerational assistance, and ultimately, family solidarity. We suggest that functional solidarity is more than the exchange elements of aid and assistance and should include the plans that older parents have for caregiving, if needed in the future, as a final outcome in the solidarity of later life families.

We view the exchange portions of functional solidarity as behavioral and plans for care as cognitive dimensions of functional solidarity. Approaching functional solidarity in this manner will allow us to expand on the elements in the family solidarity theoretical model by extending the theory into the issue of parents' plans for assistance or caregiving from their adult children, should they need it,

above and beyond any intergenerational exchange of aid and assistance they are giving or receiving from their children. That is, we will define and measure elderly parents' plans for care as a dimension of functional solidarity and as an outcome of preexisting patterns of intergenerational aid. To our knowledge, other than the Walker and Pratt (1991) theory and test of viewing caregiving as a continuum of aid rather than a distinctly different aspect of familial relations, the influence of intergenerational exchanges of aid on older parents' plans for care has not been formally tested nor addressed in other studies of intergenerational aid and assistance.

Second, this study will allow us to formally incorporate functional solidarity into a specified, theoretical model of family solidarity. Bengtson and his colleagues, while never formally testing the relationship between functional solidarity and the other dimensions of family solidarity, have suggested that a logical step in the development of the theory is to examine the exchange dynamics in intergenerational relations as they relate to family norms, affection, and association (Bengtson & Roberts, 1991). That is, in what way do structural factors, norms, affection, and association influence levels of intergenerational resource exchange? Moreover, with the addition of plans for care, we will be able to go beyond

exchange dynamics to examine how exchange influences elders' plans for care, should they need it.

Related to this discussion, the use of the family solidarity theory will enable us to address the issue of model specification (Bengtson & Roberts, 1991; Roberts & Bengtson, 1990). For example, from the models that have evolved out of the theory of family solidarity (i.e., Roberts et al., 1991; Rossi & Rossi, 1990), it is not clear whether functional solidarity is an antecedent or a consequence of associational solidarity or whether, for example, the effect of normative solidarity on functional solidarity is direct, indirect, or both.

Some scholars argue that affectional and associational solidarity are most representative of family solidarity (Bengtson & Roberts, 1991; Roberts and Bengtson, 1990; Roberts et al., 1991). Others argue that what parents and their children do for each other is a complicated matter than includes numerous factors, such as proximity to each other, feelings about each other, the needs of individual family members, or competing demands on family members (Rossi & Rossi, 1990). These scholars maintain that families are quite different from groups that are formed with no prior knowledge of each other. In the former case, solidarity and behaviors of individual members are affected by longstanding characteristics of the relationships between members and, therefore, in families sentiment determines

behavior; in the latter case, there is not a prior knowledge of each other and, hence, group norms and subjective feelings about members of the group form over time through interaction and shared activities and behavior is what determines sentiment (Rossi & Rossi, 1990). Nonetheless, it is clear that these issues of where each of the dimensions "fit" in the overall model of family solidarity need further investigation.

Organization of the Study

This study is quantitative in nature and draws upon primary data analyses of a telephone survey used in a concurrent larger study of filial responsibility expectations among older adults in the U.S. That project was conducted at the Center on Rural Health and Aging at the University of Florida, under a grant from the National Institutes on Aging (AG09649). The present investigation is a segment of the more comprehensive project and is divided into five chapters, including this introductory chapter.

The second chapter of this inquiry comprises a comprehensive review of several sets of literature. First, the literature on the theory of family solidarity is examined, including the historical origins of the theory, current developments in the construction of the theory, and the constructs or elements that constitute the theoretical model of family solidarity. Second, the literatures on

family relations and intergenerational exchange of aid and assistance are reviewed to delineate the factors affecting the various components in the theory of family solidarity. This facilitates the development of the proposed theoretical model of family solidarity used in this study and testable hypotheses.

The third chapter discusses the methodological procedures used in this research. Included are the sampling procedures and a demographic profile of the survey respondents. Additionally, conceptual frameworks and measures of the predictor and outcome variables are addressed, as well as the statistical analyses used.

The fourth chapter will present formal testing of the theoretical model used in this study. The data are analyzed with correlations and path analyses. The chapter reports the results of the bivariate and multivariate statistical analyses and possible explanations for the findings.

Finally, the fifth chapter is a summary, discussion, and conclusion of the findings. In addition, limitations and implications of the study are presented. These encompass such issues as theoretical, methodological, and statistical concerns in studying family solidarity. Suggestions for future research are also proposed. Included are the effects of family solidarity on older parents' well-being, the importance of studying both generations and family histories with regard to family solidarity, as well

as the implications of statistical and measurement issues on the study results and the ethical and moral implications of family support and solidarity.

CHAPTER 2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Theoretical Framework

Theory development and research in the area of intergenerational solidarity has enjoyed a long tradition of scholarly effort. Much of this work pertains to one of the most basic concerns in sociology: the nature of the social bond (Nisbet, 1970). The concept of the social bond has been an important construct which has guided much of sociological theory and research (Bengtson & Mangen, 1988) as sociologists (and others) sought to answer the question of how social order is possible and the nature of the ties that bind individuals to groups (Durkheim, 1893/1984; Hobbes, 1651/1950; McChesney & Bengtson, 1988).

In the family and social gerontology realms, social bonding is particularly germane to relations between parents and their children. What is it that causes some parents and children to seem closer than others? Why do members of one family seem devoted to each other, seek each other out, and enjoy a wide range of activities together while members of other families act like completely disconnected individuals, related only by blood? Why are some families or individual

family members more willing to provide long-term care to elderly family members than are others?

In attempting to answer questions such as these, family sociologists and gerontologists have relied upon the works of various social theorists concerned with elements of group harmony and order. These theorists, some of whom will be discussed in more detail in the section below, have termed the force or property that is responsible for group cohesiveness, familial or otherwise, as solidarity, bonding, cohesion, or integration. In keeping with the theoretical framework upon which this study is based, the term family solidarity (or solidarity) will be used. The following section presents the historical underpinnings of one theory of family solidarity. From there, the formal theoretical model used in this study is delineated and explained.

Historical Origins of the Theory of Family Solidarity

The theory of family solidarity (Bengtson & Schrader, 1982; Roberts & Bengtson, 1990; Bengtson & Roberts, 1991) seeks to explain how intergenerational (parent-child) solidarity is formed and maintained. The development of the theory has been an on-going project since the 1970s (Bengtson et al., 1976). It is based on Durkheim's (1893/1984) notions of mechanical and organic solidarity, Tönnies' (1887/1957) ideas on *gemeinschaft* and *gesellschaft*, Parsons' (1951) and Parsons' and Bales' (1955) work on the

cohesiveness of social systems, and the work of Heider (1958) and Homans (1950, 1961) on the social psychology of group membership. Each of these individual's work is interconnected with family solidarity theory and form the dimensions of the conceptual framework.

Mechanical and organic solidarity. As were many social thinkers and theorists of the time, Emile Durkheim was concerned with the macro conditions that made social order and solidarity possible in light of individual personalities (Coser, 1984). His scientific observations of simple homogeneous societies and modern heterogenous societies led him, in The Division of Labor in Society (1893/1984), to differentiate between two types of solidarity, mechanical and organic. In simple societies, Durkheim argued there existed mechanical solidarity or a collective consciousness which allowed individuals to bond together and to form a determinate system of beliefs and sentiments. This system we would call society, with its shared norms and values. In more modern societies, due to the more complex division of labor present in them, Durkheim concluded that group members are both independent and interrelated with each other, similar to biological organisms. In these societies, then, individuals (the parts) serve to bind the society (the whole) together and maintain its existence. This type of solidarity Durkheim termed organic.

Durkheim, however, did not argue that one type of solidarity must exist to the exclusion of the other. In fact, he argued that in order for society to remain harmoniously cohesive and functioning both mechanical and organic solidarity must be present. As Roberts et al. (1991) point out, what Durkheim identifies then is two bases of solidarity, normative prescriptions toward group cohesion and functional interdependency of group members.

Gemeinschaft and gesellschaft. Along a similar vein as Durkheim, Ferdinand Tönnies (1887/1957) distinguished between highly cohesive social relations based on rules of reciprocity and mutual obligation, such as those found among family members and simpler societies, and relations based on contractual consensus and voluntary exchange, such as those in more impersonal, weakly bonded complex societies and groups. Tönnies termed these societal types as *gemeinschaft* and *gesellschaft*, respectively. While maintaining normative prescriptions and obligation as part of group solidarity, he adds consensus among group members over "rules" of exchange to the theoretical model; that is, social bonds are only possible when social differentiation and disparity are at a minimum (Coser, 1984; Roberts et al., 1991).

Solidarity in social systems. Most of Talcott Parsons' work dealt with the factors that were fundamental to the continued existence of society. These factors include socially accepted norms, values, goals, social order, and

normative standards, all of which allow people to look at the world in similar ways (i.e., through norms and values) in order for society's members to predict what others will think and do. Society needs shared, articulated sets of goals, such as the success of the family, in order to maintain equilibrium and order (Aberle, 1967; Ritzer, 1992). Parsons' interest in social solidarity also engendered an interest in the function of the family for general society. In Parsons' view, in order for any social system to continue, individual members must be integrated into that system (Parsons, 1951). One place where this assimilation process could occur was in the family, through the transmission and internalization of societal norms and values (Parsons, 1955). Two reciprocal family roles were necessary for societal integration to occur: the instrumental role of supporting the family's physical needs and the expressive role of supporting the family's emotional needs (Parsons, 1955; McChesney & Bengtson, 1988). While perhaps not explicitly defining it as such, Parsons seems to be alluding to the exchange of resources among family members through the expression of these two functional roles. Thus, in addition to depicting the importance of norms and values to social solidarity, Parsons also contributes a more functional aspect of solidarity, that of resource exchange or functional solidarity (McChesney & Bengtson, 1988).

Group membership. Resource exchange is central to the group dynamics work of Homans (1950, 1961) and Heider (1958) and both specify, on a more micro, social psychological level, the importance of it to social solidarity in terms of mutual reinforcement in interpersonal relationships (Bengtson & Roberts, 1991). In their view, solidarity in society is an individual's needs for rewards from others (Homans, 1961; Bengtson et al., 1976). These rewards, and hence social solidarity, are met through mutual sentiment (affection/liking), interaction (association/contact), similarity (consensus), and norms of group membership, as well as similarity (consensus) of those norms among group members (Bengtson & Roberts, 1991; Heider, 1958; Homans, 1950). Unlike the more macro approaches of Durkheim, Tönnies, and Parsons and Bales, however, these social psychologists emphasized and recognized the importance of mutual affection and interaction among group members to solidarity, as well as incorporating the more precise notion of similarity of interests (as opposed to the general notion of consensus) among group members as increasing solidarity (Roberts et al., 1991). Thus, if the family is viewed as a special type of small group, in addition to normative, functional, and consensual solidarity, Homans and Heider add associational and affectual solidarity to the theoretical framework of the family solidarity theory.

In sum, five elements of solidarity have been identified from sociological and social psychological constructs. The elements are (1) association or interaction, (2) affection or mutual liking, (3) consensus or similarity, (4) functional interdependence, and (5) normative integration (Roberts et al., 1991). These elements form the conceptual framework for the family solidarity model.

Conceptual Framework of the Family Solidarity Model

In 1974, attempts were begun to conceptualize the nature of intergenerational cohesion in aging families (Black & Bengtson, 1974). In that early paper, Black and Bengtson define the components of a unidimensional meta-construct, family solidarity, as affectional, associational, and attitudinal consensus. Using pilot data, these interdependent elements were found to be essential to cohesive parent-child relationships and conformed to their conceptualization of family solidarity, both intra- and intergenerationally (Bengtson et al., 1976; Black & Bengtson, 1974; Roberts & Bengtson, 1990).

A formal model of family solidarity in aging families was then proposed in 1976 (Bengtson et al., 1976). In this model, solidarity between older and middle generations, in the form of consensus, affection, and association, was causally linked with nine constructs such as

intergenerational helping behaviors, residential propinquity, dependency needs of the older generation, filial responsibility norms, and intergenerational communication via letters and telephone.

Further refinement of the model was undertaken in 1982 (Bengtson & Schrader, 1982) and measures of the constructs were even more developed in 1988 (Mangen et al., 1988; McChesney & Bengtson, 1988). Table 1 presents the ensuing dimensions defined as essential to family solidarity, with nominal definitions and empirical indicators of each. The dimensions include (1) association or contact, (2) affection or emotional attachment, (3) consensus or agreement, (4) function or patterns of intergenerational support or resource sharing, (5) filial expectation norms or individual obligations to the family, and (6) opportunity structure for family interaction or the availability of family members for interaction as influenced by such factors as propinquity, fertility, and health of family members (Bengtson & Roberts, 1991). It should be noted that consensual solidarity deals with the general degree of agreement of family members on such issues as religiosity, marriage norms, and political conservatism, while normative solidarity addresses the strength of commitment of family members to family obligations and roles (Landry & Martin, 1988).

In the 1982 iteration of the model, as well as later versions, solidarity between generations is emphasized.

Table 1: Six Elements of Family Solidarity, with Nominal Definitions and Examples of Empirical Indicators

Construct	Nominal Definition	Empirical Indicators
Associational solidarity	Frequency and patterns of interaction in various types of activities in which family members engage	<ol style="list-style-type: none"> 1. Frequency of intergenerational interaction (i.e., face-to-face, telephone, mail) 2. Types of shared common activities (i.e., recreation, special occasions, etc.)
Affectual solidarity	Type and degree of positive sentiments held about family members, and the degree of reciprocity of these sentiments	<ol style="list-style-type: none"> 1. Ratings of affection, warmth, closeness, understanding, trust, respect, etc. for members 2. Ratings of perceived reciprocity in positive sentiments among family members
Consensual solidarity	Degree of agreement on values, attitudes, and beliefs among family members	<ol style="list-style-type: none"> 1. Intrafamilial concordance of individual measures of specific values, attitudes, and beliefs 2. Ratings of perceived similarity with other family members in values, attitudes, and beliefs
Functional solidarity	Degree of helping and exchanges of resources	<ol style="list-style-type: none"> 1. Frequency of intergenerational exchanges of assistance (e.g., financial, physical, emotional)

Table 1--continued

Construct	Nominal Definition	Empirical Indicators
Normative solidarity	Strength of commitment to performance of familial roles and to meeting familial obligations (familism)	2. Ratings of reciprocity in the intergenerational exchange of resources 1. Ratings of importance of family and intergenerational roles 2. Ratings of strength of filial obligations
Structural solidarity	Opportunity structure for intergenerational relationships reflected in number, type, and geographic proximity of family members	1. Residential propinquity of family members 2. Number of family members 3. Health of family members

Source: Bengtson & Roberts (1991).

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That is, Bengtson and his colleagues argue for using the family as the unit of analysis rather than individual family members. Mangen (1988) terms these the lineage and the generational levels, respectively. Using individuals as the unit of analysis is seen as problematic because (1) it cannot take into account the generational position of the individual; that is, incomplete or inaccurate information may be obtained if only specific individuals are measured because that person can occupy many family positions (i.e., mother, daughter, and granddaughter in a three-generation family); and (2) the perceptual biases of a single family member can affect the validity of such studies (Mangen, 1988).

To eliminate or control these potential problems, Bengtson and his colleagues propose a model in which the various elements of family solidarity are examined across generations. Thus, structural characteristics such as proximity to family members, number of living children, grandchildren, and parents, and composition of the individual's household are examined. Associational solidarity is measured by asking each generation about frequency of interaction via telephone or letter writing and the frequency and quantity of specific activities in which family members engage. Affectual, consensual, functional, and normative solidarity are all measured by asking both the elderly parent and the children about, for example,

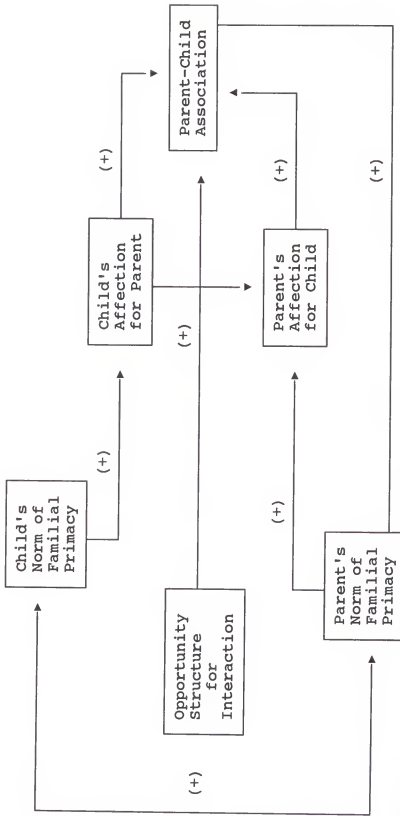
agreement on certain issues and attitudes, such as political and religious ideologies, exchanges of assistance and support, and perceptions regarding intergenerational behaviors involving an aging parent (Bengtson & Schrader, 1982).

Later testing of the model (Atkinson et al., 1986; Roberts & Bengtson, 1990; Bengtson & Roberts, 1991), in the third and fourth stages of the development of the theory, showed that family solidarity is not a unidimensional meta-construct and that different variables predict each component. In the 1990 version, family solidarity is a multifaceted, multidimensional construct, and normative integration and balanced exchange of resources between aging parents and their adult children are posited to predict affectional solidarity between generations which, in turn, predicts parent-child associational solidarity. Consensual solidarity is now treated as an independent dimension in the model because it was not related to affection or association, as hypothesized (Roberts & Bengtson, 1990; Bengtson & Roberts, 1991). Other conceptual dimensions of parent-child cohesion, such as consensus on norms related to familial closeness and obligation, as well as the functional exchange aspects of parent-child relations, are now included in the model (Roberts & Bengtson, 1990). Additionally, Roberts and Bengtson (1990) suggested that the initial emphasis on dyadic level constructs was premature and

partially retracted their earlier assertions for lineage level measurement to allow potentially important individual level differences between elements in the model to emerge.

The 1991 iteration of the model represents the most current and developed version. In it, nine propositions related to intra- and intergenerational normative, affectual, and associational solidarity were tested. Figure 1 depicts the 1991 revised model and summarizes the empirically tested connections between the elements.

As shown in Figure 1, when structural solidarity, or the opportunity structure for interaction through such factors as proximity, number, and health of family members, is controlled, greater agreement between aging parents and their children regarding filial expectation norms (or higher consensual solidarity on this norm) is associated with higher intergenerational affection which, in turn, is correlated with more frequent association between generations. That is, (1) high levels of parent/child affection for one another are associated with high levels of parent/child interaction; (2) there is a positive (though weak) direct relationship between a parent's familism norms and association; and (3) opportunity for interaction (i.e., via proximity and health) is positively associated with associational solidarity. However, in this model, functional solidarity is not accounted for or tested due to



Source: Adapted from Bengtson and Roberts, 1991. Reprinted from the *Journal of Marriage and the Family*, 53(4), 867, by permission from The National Council on Family Relations, 3989 Central Avenue, Suite 550, Minneapolis, MN 55421.

Figure 1: Elements of Revised Family Solidarity Model

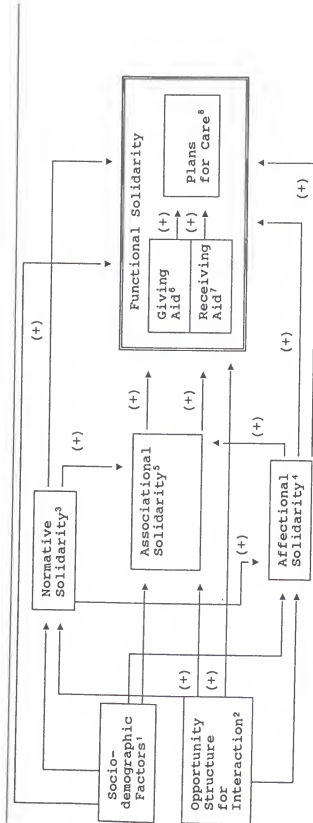
inadequate indicators of exchange given and received (Bengtson & Roberts, 1991).

Literature Review, Hypotheses, and Proposed General Model

Based on the principles of the theory of family solidarity discussed above, the following section is a review of the literatures which offer justification for the specific hypotheses regarding the direct and indirect effects between variables in the proposed study. In this study, functional solidarity is the outcome variable (see Figure 2, p. 36). Because consensus, which requires information from both the parent and child generations, was not the focus of this study, consensual solidarity is not included in this model.

Functional Solidarity

The exchange of aid and assistance among family members of different generations is a key aspect of family solidarity (Hancock et al., 1988). Family members are enduring sources of money, goods, and services, as well as contact, emotional support, and companionate relationships (Hagestad, 1981; Hancock et al., 1988) and there is a general tendency and preference for family members to turn to kin in times of need or trouble (Treas & Bengtson, 1987). The interdependence of intergenerational exchange dynamics points out that exchange can be both a cause and a



- 1 = Race, parent-focal child gender, parent-focal child marital statuses, parental age, residential location, parent-focal child employment statuses, parental income, parental educational level
- 2 = Proximity to focal child, number of living children, parental health
- 3 = Parental filial expectations/obligations
- 4 = Quality of parent-focal child relationship
- 5 = Frequency and type of contact with focal child
- 6 = Parental aid and assistance given to focal child
- 7 = Aid and assistance received from focal child
- 8 = Parental plans for care

Figure 2: Proposed Family Solidarity Model

consequence of other facets of family solidarity (Hancock et al., 1988), including the plans for care that an elderly parent may have.

In this study, we conceptualize functional solidarity, or the exchange of familial aid and assistance and an elder's plans for care, as a consequence of structural, normative, affectional, and associational solidarities. Functional solidarity is viewed as a multidimensional construct in the form of aid and assistance given by an aging parent to an adult child; as aid and assistance given by an adult child to an elderly parent; and above and beyond these exchange elements, as an older parent's plans for care, in the event of illness or infirmity. We hypothesize that the higher the levels of both types of inter-generational exchange, the more likely an elderly parent will be to select a child or child-in-law versus some other relative, person, or social agency when considering plans for care.

It is also important to recognize, on a much broader level, that the theory of family solidarity has rarely been applied to the question of functional solidarity in spite of conceptual links between the dimensions of the theory. In part, this is due to the fact that Bengtson and his colleagues have lacked adequate measures of reciprocal functional solidarity (Bengtson & Roberts, 1991) in their on-going studies and data. However, in two studies which

included a single measure of helping behaviors (how often a child helped the respondent with chores or errands) as a part of models of family solidarity (Atkinson et al., 1986; Roberts & Bengtson, 1990), functional solidarity was conceptualized as causally prior to affectional and associational solidarity and was a significant (and positive) predictor of only associational solidarity in one study (Atkinson et al., 1986), but a positive and significant predictor of both association and affection in another (Roberts & Bengtson, 1990).

We suggest, however, that functional solidarity is an outcome of association and affection, as well as norms of filial obligation and opportunity structures for interaction. Bengtson and Roberts (1991) argue that affection and association are the most idiosyncratic behavioral characteristics of family groups and, thus, most reflective of family solidarity. As discussed in the preceding chapter, however, Rossi and Rossi (1990) argue that, in families, it is sentiment (i.e., affection and association) that determines family solidarity and, ultimately the behaviors of family members toward each other and not vice versa.

For reasons we will detail in subsequent sections of this chapter, affection and association are equally likely to increase functional solidarity and may be more indicative of family solidarity, particularly in later life families.

Rather than intergenerational exchanges leading to increased frequencies of interaction or levels of affection, we envision a model in which interaction and affection, as well as other dimensions of family solidarity, lead to increased levels of intergenerational exchange and parental expectations for assistance, if needed, from a child rather than others as a way to explain the rather amorphous notions of the bonds of solidarity or sense of 'we-ness' and exchange between family members (Scanlon & Marsiglio, 1993; Ekeh, 1974). We will provide specific hypothesized relationships between these variables and functional solidarity in the sections that follow. If we are correct in our thinking, we will be better able to predict which family members, if any, can be expected to give and receive intergenerational aid and assistance in later life families. This is especially important information in light of the demographic, ethical, and moral concerns related to the care of elders by family members.

There are a number of factors that might affect and mediate the hypothesized relationships between the four remaining dimensions in the proposed model and functional solidarity. Each will be reviewed below and relationships in the proposed model will be specified. Note that these hypotheses will be described in terms of the direct and indirect effects of each predictor variable on the outcome

variables, as well as the antecedents to the predictor variables.

Because of the large number of variables, the model to be estimated is quite complex. In order to provide the reader with an organizational framework, Figure 2 presents the hypothetical relationships between the variables and concepts used in this study, as well as the proposed family solidarity model that will be tested in this research. The discussion of the various paths will be accomplished by working our way backward through the model, beginning with the predictor variable closest to the outcome variables.

Associational Solidarity

As originally conceptualized in all of Bengtson and colleagues' family solidarity models, associational solidarity is seen as an outcome variable. The amount or frequency of contact and shared activities between family members is the means by which associational solidarity is assessed in the family solidarity model; it is assumed that more contact implies more family solidarity (Mangen & Miller, 1988). Contact can also be a multidimensional construct composed of face-to-face interactions, formal and ritualized events such as birthday celebrations, or indirect contact such as through letter writing (Mangen & Miller, 1988).

Survey data suggest that there is a high degree of intergenerational contact (Shanas, 1979; Treas & Bengtson, 1987; DeWit et al., 1988), though the types of interactions that occur can be affected by the proximities, marital statuses, and genders of family members. Thus, for example, married daughters have closer ties to their parents than do married sons. At more proximate distances face-to-face contact and telephone conversations occur more often than at less proximate distances. And, infrequent overnight visits and letter writing take place more often at greater distances than at more proximate distances (DeWit et al., 1988; Treas & Bengtson, 1987).

While associational solidarity seems to be a fairly straight forward dimension of family solidarity, we question its causal order in the formal model; that is, is associational solidarity an outcome of the other dimensions of family solidarity, as it is in all of the family solidarity models to date (i.e., see Bengtson & Roberts, 1991 or Roberts & Bengtson, 1990), or is it causally prior to functional solidarity?

It is certainly reasonable to presume that increased helping behaviors among family members should lead to increased intergenerational associations. However, rather than maintaining that associational solidarity depends on functional solidarity, we suggest, as Rossi and Rossi (1990) have posited, that functional solidarity depends on

associational solidarity; that is, we argue that parents and children who interact with each other more often will exchange more and parents will be more likely to choose a child that they interact with often to care for them simply because of an increased awareness of each other's needs and problems, due to the higher levels of contact. We suggest that interaction provides older parents and their children with the opportunity to understand each other's needs and available resources, with the involvement in each other's lives that might motivate intergenerational exchanges, and with the physical opportunities to achieve such exchanges, above and beyond the effects of proximity. Thus, in this study, we are asking if frequency of contact directly affects the giving and receiving of familial aid and assistance and an elderly parent's plans for care in the event of severe illness or disability, and indirectly affects older parents' plans for care through aid given to and received from children. For the reasons we stated above, we find this conceptualization to be much more sensible and useful in determining and theorizing about family solidarity.

Associational solidarity or the frequency of contact with children is expected to be positively associated with functional solidarity. Thus, associational solidarity will have a positive direct effect on the giving and receiving of intergenerational aid.

In addition, higher levels of associational solidarity will directly increase the likelihood of an older parent selecting a child or child-in-law, as opposed others or social agencies, in terms of plans for care. We also expect that higher levels of associational solidarity will indirectly affect elderly parents' choices of a child or child-in-law as a helper (rather than others) through increased levels of intergenerational exchange of aid.

Affectional Solidarity

Gronvold (1988) conceptualizes affectional solidarity as the quality of mutual sentiments that people attach to their relations with each other, such as love, affection, and liking. These psychological states are difficult to operationalize and, thus, the affectual dimension of parent-child relationships has been somewhat neglected by researchers (Treas & Bengtson, 1987). Nonetheless, as defined earlier, affectional solidarity in the models proposed by Bengtson and his colleagues is the kinds and amounts of positive sentiment that each family member feels toward or perceives about other family members (Bengtson & Schrader, 1981; Gronvold, 1988). These sentiments seem to originate solely in, or are explained exclusively by, normative solidarity; that is, the higher the norms of filial responsibility, the greater the affection for a child (Bengtson & Roberts, 1991; Roberts & Bengtson, 1990),

regardless of opportunity structures for interaction such as proximity (Rossi & Rossi, 1990) or sociodemographic influences.

As originally developed by Bengtson and Black (1979), affectional solidarity includes such components as understanding, trust, fairness, respect, affection, communication, and harmony between generations. Affectional solidarity is fundamental to family solidarity because it imbues the sense of closeness and cohesiveness between family members. If the basic elements of trust or fairness or understanding are, for example, absent in familial relations, it is not difficult to imagine that other elements of family solidarity, such as frequency of contact or intergenerational exchanges of aid and assistance, will be adversely affected. Indeed, Rossi and Rossi (1990), Roberts and Bengtson (1990) and Bengtson and Roberts (1991) have shown that affectional solidarity is positively correlated with associational solidarity and with the exchange forms of functional solidarity.

There is, however, some question as to whether intergenerational aid predicts affectional solidarity or vice versa. Bengtson and his colleagues (Roberts & Bengtson, 1990; Bengtson & Roberts, 1991) argue that balanced on-going exchanges engender positive sentiment between parents and children, reflecting the balancing of costs and rewards in

social relationships that are characteristic of social exchange theory principles (e.g., Homans).

On the other hand, other researchers (e.g., Rossi & Rossi, 1990; Whitbeck et al., 1994) contend that such reasoning tends to overlook the ways in which a family's history can influence solidarity. As Homans (1950) has suggested, in order for exchange to take place, there must be sentiment or liking of the person with whom we exchange. Indeed, Rossi and Rossi (1990, p. 266) clearly state that "affective closeness of contemporary parent-adult child relationships is the dimension of solidarity most deeply rooted in early family life, which in turn sets the stage for the frequency of social interaction and help exchange." These early family histories, in which affection, interaction, and exchange patterns between family members are developed and reinforced, can be expected to influence role changes, dependency and caretaking issues, and the negotiation and the maintenance of support systems in later life families (Whitbeck et al., 1994). Thus, early family relations would be expected to influence contemporary feelings of affection and contact among family members. In turn, affection can affect contact between an older parent and a child, as well as the ability of family members to support each other, through intergenerational exchanges, and who an older parent might plan on choosing for caregiving,

both directly, and indirectly through associational solidarity.

Several direct and indirect paths are expected between affectional solidarity and the three types of functional solidarity. In terms of direct effects, affectional solidarity is expected to positively affect associational solidarity, as well as the giving and receiving of aid between parents and adult children; parents who have high levels of affectional solidarity with their children are also expected to more often plan for their children to provide assistance and aid, if needed, than parents who have low levels of affectional solidarity. Parents with low levels of affectional solidarity toward children will be more likely to plan to use social agencies or nursing homes, in case of impairment or frailty.

In terms of indirect paths between affectional solidarity and functional solidarity: first, higher levels of affectional solidarity will lead to increased associational solidarity, in turn increasing the giving and receiving of intergenerational aid and the likelihood that an older parent will expect a child to assist them when thinking of plans for care; and, second, the positive relationship between affectional solidarity and plans for care will be mediated by both aid given by parents to children and aid received from children.

Normative Solidarity

Kinship norms are societal prescriptions or expectations for attitudes and behaviors directed toward family members. These culturally defined attitudes and behaviors are guided by a sense of obligation and sanctioning for indifference to them (Rossi & Rossi, 1990; Finley et al., 1988; Mangen & Westbrook, 1988). Group cohesiveness or solidarity depends on these norms; that is, the more one conforms to the group norms, the more interaction and liking is received from other group members, and the more valuable the group experience is to the individual (Homans, 1957).

In terms of family solidarity, Mangen and Westbrook (1988) conceptualize normative solidarity as consisting of two components: (1) filial responsibility expectations and obligations (termed familism) and (2) the degree of intergenerational consensus regarding these filial responsibility expectations and obligations. However, Mangen (1988) states that no support has been found for the consensus component of normative solidarity. For this reason, and because this study is concerned with only the parent generation, we will use the filial responsibility expectations component of normative solidarity.

Note, as mentioned in the previous chapter, that in terms of filial responsibility expectations, we are describing generalized or "universalistic" norms regarding

the obligations of adult children to their aging parents and not the individual or "particularistic" situations of parents and their children (Lee et al., 1994a). That is, it is possible for one to believe, in the abstract, that "adult children" should provide support to "aging parents," but to recognize that in their own particular situation that support is not possible or forthcoming, perhaps because their own adult child is out of work or lives a great distance from them. Nonetheless, the theory of family solidarity does imply a positive relationship between normative solidarity and other forms of family solidarity, such as association or exchange of assistance. This may represent an important connection between attitudes and behaviors (Lee et al., 1994a) which could have beneficial or detrimental effects on family solidarity.

As stated earlier, filial responsibility expectations refer to the degree to which parents generally expect adult children to provide support, assistance, and aid to them in times of need (Seelbach, 1977, 1978; Seelbach & Sauer, 1977; Blieszner & Mancini, 1987). However, Mangen and Westbrook (1988) point out that norms of filial responsibility, as well as the enforcement of those norms, are not fixed; that is, they can be influenced or explained by circumstances such as demographic, societal, situational, and family structure changes. Some of these antecedents will be discussed in subsequent sections.

Normative solidarity, as with associational and affectional solidarity, also may have its roots in early childhood experiences (Rossi & Rossi, 1990). Children who are exposed to higher levels of kin obligations and subsequent behaviors to that effect tend to develop a stronger sense of filial obligation and to retain those norms in the present (Rossi & Rossi, 1990). Furthermore, those norms of familial obligation do translate into increased affection, association, and familial resource exchanges (Bengtson & Roberts, 1991; Roberts & Bengtson, 1990; Rossi & Rossi, 1990). In fact, from a social exchange theory perspective, it seems that having a sense of filial obligations is a necessary condition of resource exchange among family members, otherwise there is no value to exchanges (i.e., there would only be unbalanced, random exchanges and of reciprocity), for the individual member or the family group. Thus, there is no logical reason to suspect that the simple act of intergenerational exchanges would lead to filial responsibility expectations in family groups.

In terms of observed correlations with other dimensions of family solidarity, some researchers have, indeed, found that filial expectation norms are positively associated with affectional solidarity (Bengtson & Roberts, 1991; Roberts & Bengtson, 1990) and associational solidarity (Atkinson et al., 1986; Bengtson & Roberts, 1991; Roberts & Bengtson,

1990). Still others have discovered that filial responsibility expectations are positively related to aid given to adult children by elderly parents, when factors such as parental education, income, and health are controlled, yet have no effect on the receiving of aid from adult children by elderly parents (Lee et al., 1994b).

In spite of these findings, we do not yet understand fully what roles the filial expectations of elderly parents, parent-child relations, and intergenerational contact play in terms of functional solidarity. While it has been found that elders who expect more from their children do not necessarily receive more in the forms of monetary and emotional support and assistance (Lee et al., 1994b), it seems likely that the relationship between normative solidarity and functional solidarity may, in part, operate through affection for a child and contact with a child, such that elders who feel less affection for their children and have less contact with them (perhaps because of less affectionate feelings between the parent and child) actually receive and/or give less aid and are less likely to expect assistance from the child, if such help is needed.

We expect the following direct and indirect relationships with regard to normative solidarity and its effect on functional solidarity: First, filial responsibility expectations or normative solidarity will be directly and positively associated with the giving type of

functional solidarity and with plans for care. That is, the higher the filial responsibility expectations of older parents, the more aid they will give to their adult children and the more likely they will be to choose a child as a helper in the event that caregiving is needed in the future. Because it has been found that filial responsibility expectations have no effect on the receiving of aid from adult children by elderly parents (Lee et al., 1994b), no relationship is proposed between normative solidarity and the receiving form of functional solidarity.

Second, normative solidarity is also expected to be directly related to both affectional and associational solidarity. That is, the higher the filial responsibility expectations of elderly parents, the more the affection they will feel for their adult children and the higher they will rate their relationship with their children; and the higher the filial responsibility expectations, the higher the frequency of contact with children.

Third, the relationship between normative solidarity and functional solidarity is expected to be mediated by affectional and associational solidarity. The higher the norms of filial obligation, the higher the affectional solidarity, and the higher the exchange forms of functional solidarity, as well as the greater likelihood of an elderly parent choosing a child over others for care, if needed. We also hypothesize that affectional solidarity and the giving

of aid to children will transmit some of the effects of normative solidarity on plans for care.

Similar indirect paths are expected between normative solidarity and functional solidarity through associational solidarity. That is, we hypothesize indirect paths from normative solidarity to associational solidarity to aid given to children and to plans for care. And, higher levels of normative solidarity will lead to higher contact between older parents and children (associational solidarity), leading to higher levels of giving aid to children, and finally to an increased likelihood of expecting aid from children, rather than others, in terms of plans for care.

Finally, we hypothesize an indirect path from normative solidarity to functional solidarity, first through affectional, then through associational solidarity. That is, high filial responsibility expectations will predict increased levels of affectionate feelings of older parents for their children, in turn predicting increased contact, and lastly, increasing the exchange of intergenerational aid and expectations for care from children. The path from normative solidarity to plans for care will also go first through affectional solidarity, then associational solidarity, and, finally, through giving aid to adult children to plans for care.

Structural Solidarity

McChesney and Mangen (1988, p. 57) define opportunity structure for interaction, or structural solidarity, as "the presence or absence of family role relationships that indicate the static potential for the development of repeated patterns of interpersonal behavior." Thus, family structure can limit the number of family members available for interaction and influence interaction opportunities through such factors as geographical proximity, number of living children, and parental health (McChesney & Mangen, 1988). In this study, the following variables will comprise structural solidarity: proximity between an elder and an adult child; number of living children and grandchildren in an elder's family; and parental health. More specific relationships between the various elements of structural solidarity and the other dimensions in the proposed model are detailed below.

The number of living children and grandchildren in an elder's family can be viewed as an enabling or constraining influence on family solidarity (McChesney & Mangen, 1988). Rossi and Rossi (1990) have found that parents with smaller numbers of children give more in terms of intergenerational aid and assistance, but receive less support than parents with larger numbers of children. We expect to find identical direct relationships with family size, in terms of the exchange forms functional solidarity. We also expect

that parents with large numbers of children will be more likely to identify a child as a potential source of care and parents with fewer children to name social agencies or other family members as sources of care. Family size is hypothesized to indirectly effect older parents' plans for care through the giving and receiving of intergenerational aid.

Rossi and Rossi (1990) have found that norms of kin obligations are independent of the size or composition of families. They argue that this is because norms of filial obligation are culturally defined and most people are able to separate abstract concepts such as filial responsibility expectations from their own concrete family situations, such as the actual size of their family. This argument is similar to the one made earlier regarding universalistic and particularistic norms (Lee et al., 1994a). Based on this logic, we expect to find an older parent's family size will be unrelated to normative solidarity.

Some scholars argue that residential propinquity may be the most important antecedent of familial associations (Lee, 1980; Lee et al., 1990) and is a factor closely related to associational and affectional solidarity and with helping behaviors in the form of functional solidarity (Roberts et al., 1991; Climo, 1988; Mercier et al., 1988).

Thus, proximity may limit opportunities for contact, for the development of affectionate relations, and for the

exchange of intergenerational aid. The nearer to each other a parent and child live, the greater the likelihood that familial associations can take place, that high quality parent-child relationships can be formed, and that intergenerational exchange can occur (Bengtson et al., 1976; Frankel & DeWit, 1989; Mercier et al., 1988). Proximity may also be related to filial responsibility expectations. Mercier et al. (1989) have found that parents who live closer to their children have higher filial responsibility expectations. The effect of proximity on functional solidarity may also be mediated by normative solidarity.

In this study, proximity to children is modeled as an exogenous variable. However, it is quite possible that some children may choose to live close to their parents because of a sense of filial responsibility or affection toward their parents, because they enjoy the contact they have with their parents, or because they are anticipating a parent's need for extensive care in the near future and want to be close by to assist that parent. Some parents could choose to live close to their children for similar reasons; they have affectionate relations with their children or enjoy contact with their children or plan on receiving caregiving from their children, and, therefore, want to be near them. thus, particular elements of family solidarity could certainly motivate parents and children to decide to live near each other because the results of their interactions

are rewarding to them or, stated differently, because they value these decisions or choices that they have made. Therefore, there are some plausible reasons to model proximity as an endogenous variable dependent upon other dimensions of family solidarity.

On the other hand, all theoretical and empirical work in the area of family solidarity (e.g., Bengtson & Roberts, 1991; Roberts & Bengtson, 1990; Bengtson et al., 1988; Rossi & Rossi, 1990) treats proximity as an exogenous variable with respect to the other dimensions of family solidarity. While these authors have not explicitly addressed this issue, in general, they seem to view proximity of family members as an opportunity structure for interaction, which explains variation in the other dimensions of family solidarity, while not addressing the issue of causality.

A search of the literature on filial responsibility expectations and kinship relations, however, provides us with several reasonable arguments for modeling proximity as an exogenous variable, which may explain the thinking of Bengtson and his colleagues and Rossi and Rossi (1990) in conceptualizing proximity as part of "opportunity structures" for interaction in family solidarity.

First, proximity between older parents and their adult children depends heavily, although not exclusively, on the residential and mobility decisions of the children, since older adults are the least mobile age group of the

population (Clifford et al., 1985). Furthermore, our measure of filial responsibility expectations taps parents' norms, not children's, and there is no evidence that parents' norms of filial responsibility influence children's behaviors (Lee et al., 1994b). On the other hand, proximity may more reasonably affect parents' filial responsibility expectations through dissonance reduction (Festinger, 1957; Finley et al., 1988; Lee et al., 1994a); that is, parents whose children move away may reduce their feelings of internal inconsistency, or dissonance, that arise when expectations cannot be fulfilled by adopting norms or revising expectations for assistance that do not view proximity or frequent interaction as obligations of children (Finley et al., 1988; Lee et al., 1994a).

Second, while considerations involving family and older parents may be one factor involved in the residential decisions of children, the literature on kinship relations has long demonstrated that other factors are of greater significance, particularly those involving economic opportunities for children (Lee, 1980; Lee, 1988; Lee et al., 1990; Mancini & Blieszner, 1989). Measures of these opportunities (i.e., regional employment rates) are not available in our data set, and, in any event, would be exogenous in the present model. Family relations may be maintained in many respects in spite of distance, by telephone or visits; this is not true of employment.

Thus, proximity of parents and children will enable or limit opportunities for family solidarity to arise; for example, it may be a factor which will determine the frequency of interaction between older parents and their children, the exchange of intergenerational aid, or the plans for care that elders make. It is, therefore, reasonable to treat proximity as an opportunity structure for family solidarity, as do those scholars most involved in the development of the theory of family solidarity, rather than as a consequence of other dimensions of family solidarity.

Finally, it is also likely that proximity is contingent upon several of the sociodemographic variables in our model, such as race and area of residence (Lee, 1980; Lee et al., 1990). However, these paths are not central to our theory; that is, the issue of whether any effects of race and residence on other dimensions of our model are direct or indirect through proximity is not the focus of this study. Inclusion of these paths would needlessly complicate the model. Therefore, proximity is treated in this investigation as correlated with other sociodemographic factors, rather than endogenous to them.

Accordingly, we hypothesize direct relationships between proximity and all three forms of functional solidarity. Parents who live close to their children will have higher levels of intergenerational exchange of aid and

will more often expect help from a child when making plans for care than parents who live greater distances from their children.

We hypothesize that proximity to children will be indirectly associated with the exchange forms of functional solidarity and plans for care, through normative, affectional, and associational solidarity. That is, we expect that parents who live closer to their children will have higher filial responsibility expectations, more affectionate feelings for those children, more contact with the children, increased exchange of aid, and ultimately, an increased likelihood of the parent selecting the more proximate child for caregiving. Normative solidarity, associational solidarity, and affectional solidarity will act separately to mediate the relationships between proximity and the forms of functional solidarity, as well as in concert with each other with normative solidarity causally prior to affectional solidarity and associational solidarity.

As originally conceptualized, parental health was seen as an opportunity structure for interaction (Bengtson & Roberts, 1991). That is, Bengtson and colleagues suggest that parents in good health are much more able to get together with their children and to interact with them. Recall that, in this model, interaction or association with family members is seen as an outcome variable. Their

results indicate that the relationship between good parental health and higher levels of associational solidarity is weak and only marginally significant ($p \leq .10$). However, this study is concerned with older parents and this may reverse the situation regarding health. Parental health may still be an opportunity structure for interaction, but in the opposite way that Bengtson and colleagues envision it, more as a need factor. We will use this conceptualization of parental health in this study.

Parental health is a factor closely associated with functional solidarity, directly and through normative and associational solidarity; that is, parental physical disabilities are more likely to precipitate the desire and need for filial support and assistance, thus positively influencing filial responsibility expectations and frequency of contact or association with children (Crimmins & Ingegneri, 1990; Lee et al., 1994b; Seelbach, 1978). Furthermore, the evidence indicates that children will help more when parents are in need (Atkinson et al., 1986).

Thus, we expect that parental health will have both direct and indirect effects on intergenerational exchange of aid and plans for care. Parents in poor health will have higher levels of normative and associational solidarity, will receive more assistance from children, and will more often expect help from children, rather than other sources of aid, in terms of plans for care. The hypothesized

relationships between parental health and aid received from children and plans for care will also be indirectly mediated through normative and associational solidarity. In terms of aid given to children, we expect that parents in good health will be more likely to give aid to their children. No indirect effects between parental health and aid given to children are hypothesized.

Sociodemographic Factors

A set of sociodemographic variables is also included in the proposed model. They are (1) race, (2) gender and (3) marital statuses of older parents and their children, (4) parental age, (5) parental employment status, (6) child employment status, (7) the area of parental residence (rural versus urban), (8) parental income, and (9) parental educational level. These factors are thought to exert influences on family solidarity and, therefore, must be controlled. More specific relationships between these variables and components in the proposed model are detailed below.

Race. There is a growing body of comparative research on the structure, function, and solidarity of nonwhite versus white families. Much of this research is comparisons of blacks and whites and generally supports the view that black families are more likely to have extensive support and exchange networks, as well as an increased likelihood of

extended families than are white families (Cox & Monk, 1990; Angel & Tienda, 1982; Smerglia et al., 1988). Additionally, black elders are less likely to use formal health and caregiving services and are more likely to rely upon family members than are white elders (Angel & Tienda, 1982; Mindel et al., 1986; Edmonds, 1990; Johnson et al., 1990; Reed, 1990). White elders, on the other hand, have been reported to have higher filial responsibility expectations than black elders (Hanson et al., 1983). The relationships between race and family structure, support expectations, and exchange, however, may be attenuated by socioeconomic factors, such as income, occupation, and educational levels, cultural differences, and racism, as well as race differences in mortality, fertility, and marital patterns (Mutchler, 1990; Tienda & Angel, 1982; Burton & Dilworth-Anderson, 1991).

Because of these race differences, we hypothesize several direct and indirect paths. We expect that nonwhite elders will have higher levels of both associational and the exchange forms of functional solidarity with their adult children, as well as being more likely to mention their adult children as sources of care if needed in later life. White elders will be more likely to specify formal caregiving services. Because of reported higher filial responsibility expectations on the part of older white

parents, we hypothesize that these parents will have higher levels of normative solidarity.

Gender. Gender of both generations is a key factor in intergenerational solidarity, particularly in terms of associational, normative, and functional solidarity. Women are traditionally thought of as family "kinkeepers" and associational ties are found to be much stronger between mothers and daughters (Lee, 1980; Abel, 1986; Atkinson et al., 1986; Suitor & Pillemer, 1988; McChesney & Mangen, 1988; Rossi & Rossi, 1990). In terms of intergenerational caregiving, because women tend to be younger than their husbands and also tend to outlive them, the majority of elders requiring care are women (Lee, 1992) and the majority who provide care are also women (Stone et al., 1987). Older women have also been shown to have higher filial responsibility expectations (Seelbach, 1977; Blieszner & Mancini, 1987) perhaps because older women feel they need more help due to less financial security than older men.

Based on this evidence, we hypothesize that older mothers will have more contact with children, will have higher levels of normative solidarity, will be more likely to receive aid from children and to select children as helpers than older fathers. We expect that older fathers will be more likely to give aid to children perhaps because they can afford to help their children more than older mothers. It is important to note here that the marital

status of the elder may affect associations between gender and the other forms of family solidarity, primarily because more resources may be available to married couples than to unmarried elders. The relationships between parent's gender and receiving aid from children and plans for care will also be indirectly mediated by associational and normative solidarity because women tend to have more contact with family members and to hold higher filial responsibility expectations, which, in turn, increase these forms of functional solidarity. No indirect path between parent's gender and giving aid to children is expected.

Similar direct and indirect paths are expected between gender of a child, associational solidarity, and the exchange forms of functional solidarity. Daughters are expected to have more contact with parents, to give more help to their parents, and to receive more assistance from them. As with parents, the marital status of the child may have an influence on these relationships.

Marital status. According to McChesney and Mangen (1988), the structure of the family or kinship network is one aspect of the potential for family solidarity. The family structure is, of course, affected by the current marital statuses of the generations. The marital status of parents and their children has been found to influence functional, associational, normative solidarity.

In terms of functional solidarity, it has been reported at the bivariate and multivariate levels that married parents provide more support to children and widowed or divorced parents receive more support from their children (Rossi & Rossi, 1990; Lee et al., 1994b; Lee et al., 1993; Seelbach, 1978). This suggests that those elderly parents who can provide more do so; married parents seem to be in a better position to help their children perhaps because they are younger or financially better off than their older counterparts. Unmarried parents receive more aid from children than married parents because of the tendency for married parents to rely more upon their spouses for help than upon their children (Seelbach, 1978). Therefore, we hypothesize that married parents will provide more aid and assistance to children and unmarried parents will receive more aid from children.

In terms of plans for care, spouses are seen as the "first line of defense" in family care (Coward et al., 1992; Lee et al., 1994a). However, because this study is concerned with intergenerational relations in family solidarity, spouses become extraneous to these relations. We therefore chose to exclude spouses when asking our respondents to consider who would help in the event of illness, infirmity, or need, leaving elderly married parents just as likely to choose a child as elderly unmarried parents. Accordingly, we hypothesize that, for elderly

parents, there will be no differences according to parental marital status in choosing a child versus others when considering plans for care.

Parents who are divorced or separated experience lower levels of contact with children than married or widowed parents (Crimmins & Ingegneri, 1990), especially divorced or separated fathers (Cooney & Uhlenberg, 1990). Widowhood, on the other hand, especially tends to increase associational solidarity (Roberts et al., 1991), perhaps reflecting the greater dependency needs of widowed parents. However, because older women are more likely to be widowed than older men and because, as discussed in the section on gender, women are the ones who maintain intergenerational kin ties and contact, these effects of marital status on associational solidarity are likely to be attenuated by gender. Therefore, we expect no relationship between parental marital status and associational solidarity.

Seelbach (1978) has found higher levels of normative solidarity among unmarried parents. It may be that because this group of elders do not have a spouse to rely upon, if they need help, they may be more concerned about where they will receive such help than married parents, thus, increasing their filial responsibility expectations. Therefore, we hypothesize that unmarried parents will have higher levels of normative solidarity.

Children's marital status is likely to influence the exchange forms of functional solidarity, as well as associational solidarity. Dwyer and Coward (1991) and Hoyert (1989) have found that married children provide less assistance to older parents than unmarried children. Their responsibilities to their own spouses and children may create role conflict and therefore reduce the aid they provide to their parents and the contact they may have with them. Therefore, we hypothesize that married children will be less likely to provide aid to their older parents and will have lower levels of associational solidarity than unmarried children.

On the other hand, unmarried children may require more help, such as coresidency, from parents than married children (Aquilino, 1990; Speare & Avery, 1993; Ward et al., 1992) because of recent economic trends which show slowed economic growth, higher unemployment rates, and high housing costs (Ward et al., 1992). Similar to the arguments made with race and aid given to children, unmarried children and their older parents can pool resources in hard economic times. Such support may be reciprocal with an older parent providing housing to an unmarried child in exchange for caregiving help (Stoller, 1983). Therefore, we expect that unmarried children will be more likely to receive aid from older parents than married children.

We expect the hypothesized effects of parent and child marital statuses on functional, associational, and normative solidarity to be direct only.

Age. We expect several direct and indirect paths between parent's age and functional solidarity. Parental age has been found to be positively and directly correlated with the amount of aid an older parent might receive from children because older parents are more likely to need such assistance as caregiving or living with a child (Roberts et al., 1991; Crimmins & Ingegneri, 1990). Previous research has also shown significant declines in aid given to children as parents age (Mutran & Reitzer, 1984; Rossi & Rossi, 1990). this effect remains even when incomes of the parent and child generations are controlled (Rossi & Rossi, 1990) and is most likely related to increased frailty with age which can limit a parent's ability to assist a child. Additionally, because of the increased risk of infirm health or frailty that comes with age, plans for care may take on added importance to old-old parents, compared to young-old parents. Thus, we expect that the relationships between age and aid received from a child and selecting a child for caregiving assistance will be positive and direct and the relationship between age and aid given to a child to be direct, but negative in direction.

In terms of associations between age and other forms of solidarity, age has been found to be positively and directly

correlated with associational solidarity and negatively correlated with normative solidarity. That is, older parents have more contact with children than younger parents (Roberts et al., 1991; Crimmins & Ingegneri, 1990) and younger parents have higher filial responsibility expectations (Brody et al., 1984; Hamon & Blieszner, 1990; Rossi & Rossi, 1990). Thus, we hypothesize direct positive effects of parental age on associational solidarity and we expect the direct effect of age on normative solidarity to be negative.

We propose that the relationship between parent's age and receiving assistance from children and plans for care will also be indirect through associational solidarity. Because of the increased risk of illness and disability as parents age, there will be more contact with children, which will serve to increase the aid these older parents will receive from their children, as well as expecting help from a child rather than others.

Affectional solidarity is likely to be influenced by both the age of the parent and age of the child. Suitor and Pillemer (1988), Bengtson (1979), and Cicirelli (1981) suggest that as children grow older, they become more similar to their parents in terms of such orientations and understandings as politics, religion, filial responsibility expectations, child rearing, and personal relations. As they age, parents and their children become more tolerant of

remaining differences between them, resulting in more harmonious and affectionate parent-child relations. An explanation for this "coming together" between older parents and their adult children is found in the theory of developmental stake. In this theory, Bengtson (1979) and Bengtson et al. (1976) suggest that as persons age, because they have invested more in their parent-child relationships, they have more at stake in terms of intergenerational relations, and thus, see their relationships with their children in a more positive light than do their children. Additionally, Aldous, Klaus, and Klein (1985) have found that elderly parents are more likely to use older rather than younger children as confidants, again perhaps because of that sense of increased understanding and tolerance for differences.

Thus, we hypothesize that the older the parents and their children, the higher the levels of affectional solidarity. Affectional solidarity will also indirectly intervene between parent's age, children's age and the receiving and plans for care forms of functional solidarity. Older parents and parents with older children will have higher levels of affectional solidarity, in turn increasing the aid these parents receive from children and the likelihood of an older parent expecting help from their children.

In terms of the aid older parents might give to their children, we hypothesize a direct negative effect only between parental age and aid given to children; that is, we expect that younger parents will be more likely to provide aid to their children than will older parents. This may be because younger parents are more likely to still be working or to have higher retirement incomes and, thereby, can afford to assist their children more than older parents.

Employment status. The effects of parental employment status on functional solidarity may be an issue of economic resources. Elderly parents who are working full-time may be doing so because they cannot afford to retire or because they are assisting needy adult children. Their employment earnings may bring their income levels above that of retired persons. Consequently, employed elderly parents may be able to provide more assistance to adult children. Because older parents who are still employed also may be more healthy than their retired counterparts, they would be less likely to receive aid from children and to choose children as potential helpers because they have the resources to consider other options. Therefore, we hypothesize that older parents who are employed will provide more aid and assistance to adult children. These parents will also be less likely to be receiving aid from children and less likely to choose an adult child when considering plans for care than elderly parents who are not employed (i.e.,

retired). These effects are likely to be reduced or eliminated by controls for income and age.

Aid received from and given to children may also be functions of the adult child's employment status and available resources. We must note, however, that the direction of the effect of child's employment status on aid received from children is not clear with the cross-sectional data that will be used in this study; that is, we do not know in this cross-sectional study whether the children quit work or reduced work hours because they are helping elderly parents which would tend to increase the aid they give to elderly parents.

Nonetheless, with that caveat in mind, there is considerable evidence in the caregiving literature to suggest that, for adult children, being employed significantly reduces caregiving assistance provided to an infirm parent because of the added demands of employment on the allocation of time to other tasks and childrearing responsibilities. This finding of competing responsibilities reducing parental caregiving is especially true if the child is a male or, regardless of gender, if working full-time versus part-time (Stoller, 1983; Stueve & O'Donnell, 1989; Boaz & Muller, 1992). Additionally, Rossi and Rossi (1990) have found that parents of employed children also reduce the amount of help they give to such children, perhaps because they do not think that employed

children need their help. Therefore, we hypothesize that children employed full-time will be less likely to provide assistance to an elderly parent than children who are not employed or who are employed part-time. Having an employed child is also expected to negatively affect an elderly parent choosing that child as a potential caregiver; that is, parents of employed children will be more likely to expect other sources of caregiving than their children.

Additionally, as suggested above, adult children who are unemployed may find that a pooling of resources between themselves and their parents is to their benefit. Thus, we hypothesize that unemployed children will receive more aid from their parents than employed children. This effect, however, is likely to be attenuated by the child's marital status. Children who are both unmarried (Ward et al., 1992) and unemployed would seem to have the most need for assistance from family members.

We expect no indirect effects between parent or child employment status and functional solidarity.

Area of residence. Residential location is a characteristic of parents that has been found to influence associational solidarity in families (Roberts et al., 1991; Crimmins & Ingegneri, 1990), as well as the quality of the parent-child relationship (Mercier et al., 1988) and the giving and receiving of aid and assistance (Lee et al., 1990). Urban elders have been found to experience less

contact with children than do rural elders (Roberts et al., 1991; Crimmins & Ingegneri, 1990). However, Crimmins and Ingegneri (1990) suggest that while it may be that urban parents have more nonfamilial sources of support and interaction available to them which may tend to reduce the need for intergenerational contacts, most likely proximity to children intervenes between area of residence and associational solidarity; older urban parents are more likely to live closer to their children than are older rural parents (Crimmins & Ingegneri, 1990) which would tend to increase contact between them.

Similarly, with regard to intergenerational exchanges of aid, Lee et al. (1990) point out that rural elders are less likely than urban elders to have proximate children. Rural children may have migrated to larger cities in pursuit of educational and employment opportunities. Their elderly parents are less likely to be able to avail themselves of family caregiving and certain types of exchange opportunities, such as proximate living or coresidence (Lee et al. 1990; Lee, 1988), thus reducing the exchange forms of functional solidarity among rural parents.

The strongest predictor of relationship quality for rural elders is, again, proximity to children (Mercier et al., 1988). While, as discussed above, rural elders are less likely to have proximate children, because rural elders have greater transportation, housing, and health problems

and fewer services available to them than do urban elders, having a child close by is of more importance to them (Mercier et al., 1988; Lee et al., 1990) and, thus, having a high quality relationship with a proximate child is also of greater importance to them because they must rely more heavily on this child in the event of infirmity or poor health.

In terms of area of residence, then, we expect that urban elders will have lower affectional solidarity than do rural elders and higher levels of associational solidarity and of the exchange forms of functional solidarity. These direct effects will also be mediated by proximity to a child.

Because of the lack of services in rural areas, area of residence will directly affect plans for care such that rural elders will be more likely than urban elders to name a child as a potential helper. For similar reasons, area of residence will indirectly affect plans for care through associational and affectional solidarity. The importance of children for rural elderly parents' plans for care will serve to increase contact with children, as well as affectional solidarity. These relationships, in turn, will increase the likelihood that rural elderly parents will expect more help from children than urban parents.

Parental income and educational level. As with parental employment status, income and educational levels of

elderly parents are likely to operate directly as "resources" with regard to the various forms of functional solidarity. Thus, higher levels of both income and education would allow older parents more flexibility and resources from which to draw in terms of ability to assist adult children or to purchase formal care, rather than relying on children for help. Indeed, other studies have found that socioeconomic variables, such as parental income, are positively related to the giving of aid to adult children (Mutran and Reitzes, 1984; Mitchell and Register, 1984; Lee, Netzer, and Coward, 1994b); that is, the higher the parental income, the more parental aid is given to adult children. This is likely a reflection of the ability of more affluent parents to help their children. Therefore, we hypothesize that the income levels of older parents will positively affect the aid these parents give to their children. Again, because parents with higher incomes may be more able to purchase help, if needed, we expect that high income will be related to choosing others for help rather than children.

On the other side of intergenerational exchange, the aid received by older parents from adult children, there appears to be no relationship with income (Mutran & Reitzes, 1984; Lee et al., 1994b). This lack of a relationship is likely to be related to an adult child's ability to help an aging parent, through the adult child's income rather than

the parent's income. We expect no relationship between parental income and the aid elderly parents receive from their children.

Similar relationships to those hypothesized about income are expected between education and functional solidarity. In terms of education and aid received from children, there seems to be contradictory evidence. Some researchers find no relationship (e.g., Lee et al., 1994b) and others find a negative relationship (e.g., Mutran & Reitzes, 1984). However, it is quite likely that income and education are highly correlated; this issue will be addressed in the formal analyses. Some research suggests that education may be a better indicator for an elderly person's life status than is income (Mutran & Reitzes, 1984). Rather than eliminating one or the other variable before analyses are conducted, we prefer to retain both, thereby capturing as much variability in resource variables as possible. Therefore, we expect that education will be positively correlated with the giving of help to adult children and with choosing someone other than children in plans for care. Parent's education and the receipt of help from adult children will not be related.

In addition, there may be indirect effects between income and education and plans for care through normative solidarity. High filial responsibility expectations have been found among elders who have lower income and education

levels (Mangen & Westbrook, 1988), perhaps because these parents may need more help from their children and, thereby, normatively presume such help. These effects of education on normative solidarity, however, may be attributable to the overall lower educational levels of older generations of elderly parents (Rossi & Rossi, 1990). Nonetheless, we expect that older parents who have lower income and educational resources will have higher levels of normative solidarity, which will serve to increase the likelihood of these parents expecting help from a child, rather than others.

CHAPTER 3 METHODS

Sampling and Procedures

The data for this study were obtained via telephone survey, in Fall 1993, from a twenty-five county sample of Kansas residents, aged 65 and older. Kansas was chosen because of the above average percentage of elders who reside in this state; in 1991, 13.9 percent of the population in Kansas was over the age of 65 (compared to 12.6 percent nationally), making it seventh among the states for percent of elders in the population (U.S. Bureau of the Census, 1992). Additionally, Kansas has a significant rural population, and, as with other rural areas in the U.S., we expected to find a significant out-migration of rural young people in pursuit of educational and employment opportunities (Clifford et al., 1985; Coward et al., 1993; Stroller & Lee, 1994). This condition would increase or maximize variation in parent-child proximity, a circumstance we deemed as essential to our research purposes in the study of family solidarity.

The sample was stratified by residential location to ensure equivalent numbers of both rural and urban residents for analytical purposes. Thus, the sample is not

representative of the general elderly population. The urban portion of the sample comes from the Kansas City metropolitan area and the rural portion from western Kansas where there are no metropolitan areas. This was done to maximize the rural/urban distinction on a limited budget, even though it did result in samples from the extremes of the distribution within Kansas. The only criterion for inclusion in the study was that the respondent had to be at least age 65. The elders may or may not have been living with a child. The possible confounding of coresidence with other variables in the model will be discussed in detail in the section in this chapter on the measurement of plans for care and in the results chapter.

Telephone numbers for the sample were obtained from purchased lists in the county areas of Kansas. The lists were based on full selections of telephone directories for these counties and were compiled so as to increase the likelihood of contacting households that contained elderly members. When a contacted household contained more than one person age 65 and older, a random procedure was used to select one respondent.

Telephone contacts were made with 1,421 eligible respondents. Of those, 400 elders completed the full interview for a simple response rate of 28.1 percent. However, there are several methods of calculating response rates, depending on what is used as the numerator and the

denominator (Lavrakas, 1993; Luck & Rubin, 1987). In this project, the firm contracted to conduct the interviews calculated a 28.1 percent response rate as follows: The number of completed interviews (400) added to the number of respondents who did not meet our inclusion criteria (142), persons who were over the quota on residency (111), cases where there was a language barrier (20), and calls made to businesses (26) for a total of 699. The numerator was then divided by 699 plus the number of refusals (1,056; total for denominator = 1,755) for a 39.8 percent response rate. Thirty-eight of the elders were childfree and are not included in this study. The final sample is 362 older parents.

We are aware that the low response rate may produce bias and this is problematic in terms of inference and generalizability to the larger population of elderly parents and family members. However, in order to test our theoretical thinking and the proposed model, we will assume that the nonresponse rate occurred randomly and that the correlations between variables are the same among responders and nonresponders.

All responses to questions regarding quality of parent-child relations, frequency of contact with children, aid given and aid received are asked about one focal child and are based on parental reports of relations with this focal

child. Responses to the plans for care variable include all available children, not just the focal child.

Our interest in this study is to examine how the various measures of family solidarity affect functional solidarity among older parents. That is, our objective in assessing the various dimensions of family solidarity is not to characterize the solidarity in each family, but rather to estimate the extent to which elderly parents experience solidarity with each child. The ideal measurement situation would be to obtain relevant information about all children of each respondent and then to devise summary measures that would not be unduly influenced by family size and other related factors. This was not possible in this study because of (1) the age of the respondents and their physical abilities to remain on the telephone for extended periods of time in order to gather information on all children and (2) budgetary constraints which did not permit detailed measures of the various dimensions of family solidarity for all children in an elder's family. Even if such data were available, adequate summary measures have not, as yet, been developed. Therefore, the problem became one of choosing an appropriate child to represent all children in families containing more than one child.

There are two possible ways to accomplish this task. One is to randomly select a child. This is the strategy used by Bengtson and colleagues in their research on family

solidarity (Bengtson & Roberts, 1991; Mangen et al., 1988; Roberts & Bengtson, 1990). The advantages to this method are that (1) average solidarity across all children may be estimated for the sample as a whole; and (2) variation in the dimensions of solidarity, such as affection and association, are maximized.

However, our interest in this research is not in the average amount of solidarity experienced by each parent with all children, but rather in the extent to which the parent experiences solidarity with any child. Our theoretical framework suggests that parents who are involved in frequent intergenerational exchanges with a child, who interact often with a child, and who have an affectional relationship with a child are more likely to plan for care from a child, in the event of frailty or disability. Conversely, those who do not have such levels of solidarity with a child are not likely to plan for care from a child. Thus, the issue is whether the respondents do or do not have at least one child with whom the parent-child relationship may be characterized as one of high solidarity, not one of estimating "average" solidarity across all parent-child dyads.

This may be characterized as a matter of estimating the maximum degree of solidarity older parents experience with any of their children. Random selection of a child would result in systematic underestimates of maximum solidarity, since the procedure might result in selection of the child

with which the parent shares the most solidarity or of the child with whom the parent shares less solidarity. The randomly-selected child might live a considerable distance away from the parent, while the parent lives very near or even with another child who is intimately and extensively involved in the parent's daily life. If random procedures had been used, selecting against the latter type of child would be problematic for our theoretical thinking because such parents would be assigned much lower values on our measures of solidarity than they are actually experiencing, whereas selecting against the former type of child would have been less problematic.

However, the objective, implied by our theoretical framework, was to obtain information about the child with whom the parent shares the most solidarity or, as we have termed it, a "focal child." This selection was accomplished prior to the measurement of the various dimensions of family solidarity. We used two criteria to choose this focal child: (1) the child who helps the parent with the greatest number of Activities of Daily Living (ADLs) or (2) the child whom the parent sees most often. Since 344 of the sample parents (95%) did not need help with ADLs, the latter criterion was used in most cases. More consistent with the way in which we are conceptualizing family solidarity, the selection of the child most involved in the parent's life

helps to ensure that the extent to which children are involved in parents' lives is not underestimated.

However, in selecting a focal child, we are aware, as Roberts and Bengtson (1990) suggest, that by not using random selection procedures the ranges of some variables may be constrained. For example, quite logically one would expect higher levels of parental affectional and associational solidarity with the child seen most often than with other children which may result in skewness among these variables. Again, however, our interest in this research is in the various levels of solidarity found in the parent generation and not in the average amounts of solidarity found in families. Thus, while not the ideal situation, and given our constraints in conducting this study, the advantages of using a focal child outweigh the disadvantages of systematically underrepresenting the various dimensions of solidarity, as experienced by older parents, which would occur if we had randomly selected a child.

Measurement of Variables and Concepts

A telephone questionnaire instrument was used to assess the variables and concepts relevant to our research here. The complete survey is contained in the appendix. In general, the measures of the various forms of solidarity (i.e., giving aid, plans for care, contact, affection) were derived from summing scores of the measures on the variables

or scales to yield indexes. In most cases, we were simply interested in the frequency with which an event occurred; for example, the frequency of contact with a focal child; the frequency of choosing someone of the child generation versus others; the mean number of tasks that a focal child helped a parent with or that a parent helped a focal child with. Thus, the summing of scores was sufficient and appropriate for our purposes.

In two cases, however, we deemed it necessary to conduct preliminary, exploratory analyses before creating indexes in order to determine the underlying dimensions of each. Affectional solidarity and normative solidarity are not seen as single measurable entities that can be appraised easily. That is, they are discrete events of complex theoretical phenomena made up of many interrelated variables. For example, affectional solidarity in families can be thought of as intergenerational emotional attachment and the quality of parent-child relationships; normative solidarity could be viewed as the generalistic expectations that parents have for help from children with regard to financial or physical support, proximate living, or visiting (note that we are not arguing that these are the only measures of affection or normative filial expectations). The constructs of affectional and normative solidarity, therefore, can be derived from the measurement of other, directly observable variables.

The appropriate statistical technique for identifying and testing the "fit" of these unifying theoretical constructs is factor analysis. We used it as a tool in determining which variables best described affectional and normative solidarity before determining the most reliable (i.e., internally consistent) scales for each of the constructs. While we could have used the individual items in our questionnaire regarding affectional and normative solidarity, given our theoretical thinking regarding these two constructs, we first wanted to test the goodness-of-fit of the theoretical model to empirical measures of the constructs. Thus, in this study, the factor analysis was exploratory and preliminary to reliability testing because we first wanted to determine the minimum number of factors that could account for the observed covariations in the data (Klim & Mueller, 1978) (i.e., the joint variance, or lack thereof, between how much a parent trusts a focal child and how much the parent understands the child).

For the factor analyses, we utilized two procedures to test the goodness-of-fit of our model to our measures. We used principal components extraction, an extraction method that is more suitable for small samples (Bickel & Doksum, 1977). This extraction method determines the number of uncorrelated principal components (factors) needed to describe the data. For the rotation phase of the factor analyses, we used oblique rotation, which allows the factor

loadings to be correlated, a situation which is much more reflective of the real world (Rummel, 1967). The results of these procedures will be discussed in more detail in the sections on affectional and normative solidarity. After determining which variables when with which factors, we created scales of the variables identified from each of the factors and conducted a series of reliability tests on these scales. The scale with the highest internal consistency (as measured by coefficient alpha) on affectional and normative solidarity was determined as the most reliable measure of each construct. Note that scores on the final scales were derived from the actual summed scores and not from factor scores. This decision to use summed scores assumes equal weighing of the items, whereas the use of factor scores would not; in hindsight, it may have been more accurate to have used factor scores in deriving the final scales.

The following is a discussion of the specific measures used, as well as the summary statistics for each measure.

Outcome Variables

Functional solidarity-giving aid. The giving of aid by an elderly parent to the focal child was measured by asking the respondents if they had given their child help with six activities in the past month with "yes" (coded 1) and "no" (coded 0) response choices (Lee et al., 1994b; see appendix, question 43a-f, pp. 189). The activities were advice on a

decision (1 = 35.6%), financial assistance (1 = 23.5%), gifts other than money (1 = 42.2%), help with a household task or chore (1 = 23.9%), help with babysitting or child care (1 = 27.1%), and help with transportation (1 = 23.6%). Affirmative responses are summed to yield a total score on this index; the range is 0-6 and the mean number of tasks that older parents help their children with is 1.77 (s.d. = 1.60).

Functional solidarity-receiving aid. The receiving of aid from an adult child was measured by asking the parents similar questions to the aid given questions with the exception of babysitting or child care (Lee et al., 1994b; see appendix, question 42a-e, p. 188). Nearly 33 percent (32.9%) of these parents had received advice from the focal child in the past month; 6.9 percent had received financial assistance; 40.3 percent had received gifts other than money; 42.1 percent had received help with a household task or chore; and 29.1 percent had received help with transportation from the focal child. As with aid given, affirmative responses are summed to generate a total score on aid received; the range is 0-5 and the mean number of tasks that children help their older parents with is 1.51 (s.d. = 1.31).

Plans for care. Plans for care were adapted from a scale by Cantor (1976). Respondents were read five situations of increasing seriousness, in which they were

asked who, if anyone, they would turn to in the event that they were in that situation (see appendix, question 47a-e, pp. 190-192). There were ten possible resources for help. These were (1) a son; (2) a daughter; (3) the respondent herself or himself; (4) a son-in-law; (5) a daughter-in-law; (6) another relative; (7) a friend; (8) a neighbor; (9) a social agency or, where applicable, a nursing home; (10) other helpers. If they chose their spouse, respondents were asked to assume the spouse was not available and to pick one of the other ten choices. The situations related to loneliness and wanting to talk; help getting to the doctor's; not having enough money to cover a very big medical bill; becoming seriously ill or disabled and needing help with activities of daily living, such as getting into and out of bed; and becoming unable to live on their own due to failing health.

Several methodological issues arise with regard to this variable. First, since our interest here is in whether or not the older parent chooses a child or child-in-law, this variable is coded 1 = a son, daughter, daughter-in-law, and son-in-law (regardless of age ranking) and 0 = other. The adult child or child-in-law scores are summed for the proportion of adult children selected. We made the decision to categorize children-in-law with children, in plans for care, because our interest with this variable is in terms of dependence on children (not a specific child), which would

include "resources" such as the spouses of adult children. We view children-in-law as conceptually closer to the adult child generation than, for example, to friends, neighbors, or social agencies.

Second, while our model does take into account the family size of the older parents in our sample, as well as the marital status of the focal child (see sections on structural solidarity and sociodemographic variables, p. 52), we did not ask our respondents about the marital status of all children in their family, which could increase or decrease the number of potential help sources for any one respondent. By not asking the marital status of all children, we are aware that we do not have a perfect measure of the older adult's caregiver network size in terms of plans for care. However, we do not view this as a major problem with misestimation because we are inclined to think that married couples would tend to act as a unit rather than as individual caregivers and having information on marital status would not appreciably alter our results.

And third, it is possible that coresidence with a child may confound or obscure relations between older parents' plans for care and the actual provision of care to them by a focal child. In this study, there were twenty-one elders who coresided with the focal child. In order to test for whether coresidence influenced plans for care, we first compared means on plans for care with the proximity

variable. Interestingly, those elderly parents who coresided with the focal child were less likely to choose a child (mean = 1.71) compared to those who live close (less than one mile away [means = 2.21] and one to five miles away [mean = 2.11]) to the focal child. Thus, older parents who live with their children are essentially no more likely to plan for care from children than are older parents who live in close proximity to focal children. Next, we created a coresidence dummy variable with coresidence to a child equal to 1 and noncoresidence equal to 0. We ran an additional path analysis, with plans for care as the dependent variable, with the coresidence dummy variable, but excluding the proximity variable. We will discuss the outcome of this sub-analysis in the results chapter in the plans for care section, in terms of the direct effects of coresidence on plans for care and the indirect effects through aid received from a focal child.

Slightly more than 40 percent (41.2%) of the elders chose a son, daughter, or daughter-in-law to talk to if they were lonely (no one chose a son-in-law) and, of those who chose a child, 69.8 percent chose the focal child; more than half (53.3%) of the parents chose a child or child-in-law to help them get to the doctor's with 75.6% of those choosing the focal child; 26.5 percent would ask a son or a daughter to help with a large medical bill (no one would ask a son- or daughter-in law) with those elders choosing persons from

the child generation selecting the focal child 74.3% of the time; 38.7 percent would plan on asking a son, daughter, or daughter-in-law for help with activities of daily living (no one would ask a son-in-law) and, of those choosing a child, 65.9% chose the focal child; and 13.8 percent chose a son or daughter for help with living accommodations with the focal child being selected by 67.4 percent of those elders choosing a child. Thus, even though the "child" response choice in the plans for care questions could be any child of the elders in this sample, they consistently chose the focal child. Any subsequent results will not be unduly influenced by not making the response choice specific to the focal child.

Predictor Variables

Associational solidarity. Frequency of contact with a focal child was the measure of associational solidarity. This was assessed with a series of four questions adapted from a nine-item scale designed to assess the frequency of intergenerational contact on a variety of family activities (Mangen & Miller, 1988; see appendix, questions 19-22, pp. 184-185). Respondents were asked how often they visited with, got together for small family gatherings such as birthdays or anniversaries with, talked over important things with, and telephoned the focal child. Response choices ranged from (0) once a year or less to (6) at least

once a day. Responses are summed to yield an index of associational solidarity with higher scores corresponding to higher contact; the range is 0 to 24 and the mean score 12.55 (s.d. = 4.07).

Affectional solidarity. This variable was to be measured in terms of (1) quality of the parent-focal child relationship and (2) emotional attachment to the focal child (Gronvold, 1988). Quality of the relationship is defined as the amount of positive sentiment between the elderly parent and focal child on such dimensions as understanding, trust, fairness, respect, and affection and was measured with an adapted 10-item scale (Gronvold, 1988; Landry & Martin, 1988; see appendix, questions 27-36, pp. 185-187). The parents were asked to assess their feelings on these dimensions with regard to the focal child and then their perceptions of their child's feelings toward them. Response choices ranged from not much at all (0) to very much (3) for each dimension of relationship quality.

Emotional attachment was measured with a 3-item scale (see appendix, questions 37-39, p. 187) measuring how well the respondents feel they get along with the focal child (not well at all = 0 to very well = 3), how close the relationship is (not close at all = 0 to very close = 3), and how well the elderly parents and their focal children communicate (not well at all = 0 to very well = 3).

Several steps, as described earlier, were involved in deriving the final affectional solidarity scale. The variables did not perform as expected in terms of relationship quality and emotional attachment; some of the variables thought to be measures of relationship quality, in fact, loaded on the emotional attachment factor. More than likely, this is because of the negative skewness of the scores on the individual items (skewness = $-.199$). Apparently, because of our choice of a focal child, the older parents in our sample assessed their affectional feelings toward that child very positively. Because the focal child is the one who helps them the most often or that they see the most often, perhaps these elders felt it would be somehow disrespectful to cast their feelings about his child in a negative light. This unforeseen error created an affectional solidarity scale that is less than desirable and we urge the reader to interpret any findings in this study regarding affectional solidarity with appropriate caution.

The factor analysis of the thirteen items, using principal components extraction and oblique rotation methods produced a two-factor model; the items, mnemonics, and factor loadings are presented in Table 2.

The reliability testing of both factors yielded a three-item scale of affectional solidarity. The variables with the highest internal consistency were contained in Factor 1. These are the variables AFFECTN, AFFECTNU, and

Table 2: Factor Loadings for Affectional Solidarity

Factor 1:

1. How much do you trust this child? (TRUST; 0.599)
2. How fair do you feel you are toward this child? (FAIR; 0.391)
3. How much do you respect this child? (RESPECT; 0.710)
4. How much affection do you feel for this child? (AFFECTN; 0.732)
5. How well do you feel your child trusts you? (TRUSTU; 0.660)
6. How much respect do you feel from your child? (RESPECTU; 0.688)
7. How much affection do you feel your child has for you? (AFFECTNU; 0.634)

Factor 2:

8. How well do you understand this child? (UNDERSTD; -0.549)
9. How well do you feel you child understands you? (UNDERSDU; -0.750)
10. How fair do you feel your child is toward you? (FAIRU; -0.694)
11. How well do you and this child get along? (ALONG; -0.769)
12. Taking everything into consideration, how close do you feel is the relationship between you and your child? (CLOSE; -0.652)
13. How well do you and your child communicate? (COMMUN; -0.729)

RESPECTU. Note, however, that these are not the variables with the highest factor loadings in Factor 1, as one would expect (see Table 2). Again this is probably a result of the negative skewness of the responses. Table 3 reports the correlation matrix for these items, with list-wise deletion, derived from the reliability test. The reliability coefficient alpha for the affectional solidarity scale was

0.750 and would not be improved by the deletion of any of the items.

Finally, the response choices were summed to yield a total score on affectional solidarity; higher scores indicate higher levels of affectional solidarity. Scores on the index range from 2 to 9 and the mean score is 8.35 (s.d. = 1.08). Because of the negative skewness of the scores, the decision was made to square the affectional solidarity variable.

Table 3: Reliability Correlation Matrix for Affectional Solidarity Scale (n = 360)

	<u>AFFECTN</u>	<u>AFFECTNU</u>	<u>RESPECTU</u>
AFFECTN	1.00		
AFFECTNU	0.50	1.00	
RESPECTU	0.58	0.58	1.00

Normative solidarity. Parental filial responsibility expectations was the measure of normative solidarity. It was assessed with a four-item scale and was based on similar concepts from earlier studies (Brody et al., 1984; Brody et al., 1983; Heller, 1976; Seelbach, 1977; Seelbach & Sauer, 1977; Brackbill & Kitch, 1991). Response choices ranged from (1) strongly agree to (4) strongly disagree and were

recoded so that high scores are equal to high filial responsibility expectations.

The identical steps used to derive the affectional solidarity scale were followed to yield a final normative solidarity scale. First, a factor analysis of a larger pool of nine items was conducted. The nine items are contained in the appendix (questions 1-9, pp. 178-180). The factor analysis, using the principal components extraction and oblique rotation methods, resulted in a three-factor model. The nine items, their mnemonics, and factor loadings are listed in Table 4.

Second, reliability testing was performed on Factors 1 and 2. The group of variables with the highest internal consistency were ones from Factor 1 and, additionally, were the ones with the highest factor loadings (see Table 4) indicating a good fit between our theoretical model and our empirical measures on this construct. The variables included in the scale are SACRIFIC, RETURN, DEBT, and CARE. The variable LIVETOGE actually reduced the reliability of the scale and was eliminated. Table 5 reports the correlation matrix, from the reliability testing, for these items, with list-wise deletion. The reliability coefficient alpha for the normative solidarity scale was 0.638 and would not be improved by the deletion of any of the items.

Forty-seven respondents did not answer all of the four questions (SACRIFIC, RETURN, DEBT, and CARE) on the final

Table 4: Factor Loadings for Normative Solidarity

Factor 1:

1. If an elderly man has a medical bill of \$1,000 that he cannot pay, his son or daughter is morally obligated to pay the debt. (DEBT; 0.756)
2. A family should be willing to sacrifice some of the things they want for their children in order to help support their aging parents. (SACRIFIC; 0.621)
3. An adult child should be responsible for the care of his or her mother or father when they become too old to care for themselves. (CARE; 0.604)
4. Parents are entitled to some return for the sacrifices they have made for their children. (RETURN; 0.570)
5. It is a good idea for elderly parents and their adult children to live together (LIVETOGE; 0.481)

Factor 2:

6. Grown married children should live close to their parents so that they can help each other. (LIVECLOS; 0.743)
7. If children live nearby after they've grown up, they should visit their parents at least once a week. (VISIT; 0.715)
8. Older people should be able to depend upon their grown children to help them do the things they need to do. (DEPEND; 0.695)

Factor 3:

9. As many activities as possible should be shared by grown children and their parents. (ACTIVITY; 0.834)
-

normative solidarity scale. For those who answered at least three out of the four questions, we added the scores on the questions they answered and divided by the number of questions they answered to derive the mean score on each

Table 5: Reliability Correlation Matrix for Normative Solidarity Scale (n=362)

	<u>SACRIFIC</u>	<u>RETURN</u>	<u>DEBT</u>	<u>CARE</u>
SACRIFIC	1.00			
RETURN	0.28	1.00		
DEBT	0.35	0.39	1.00	
CARE	0.36	0.23	0.26	1.00

nonmissing item for that respondent. For example, if a respondent answered three items with scores with scores of "1" for each item (total = 3), we divided the total by 3 (= 1) and multiplied by 4 (= 4).

Finally, the four response choices of the four items were summed to yield a total score on normative solidarity with higher scores indicating higher filial responsibility expectations. Scores on the normative solidarity scale range from 4 to 16 and the mean is 9.42 (s.d. = 1.73).

Structural solidarity. Opportunity structure for interaction or structural solidarity has three measures. The availability of family members for interaction was measured as the actual number of living children and grandchildren in the elder's family. In this sample of elders, the range was 1-19 family members and the mean number of family members was 5.25 (s.d. = 2.42). Self-reported health was ranked on a scale ranging from poor (0)

to excellent (3). Five percent of these elderly parents said their health was poor, compared to others their age; 16.6% rated their health as fair; and over three-fourths (78.4%) of these respondents rated their health as excellent or good. Proximity to the focal child was measured on a scale ranging from more than 500 miles (0) to coresidency (7). The modal category for this sample was a distance of 1 - 5 miles from parent to focal child (29.0%). Nearly 9% (8.6%) lived more than 500 miles away from the child and nearly 6 percent (5.8%) of the elders lived with the focal child.

Sociodemographic factors. There are nine exogenous sociodemographic variables. Respondents' race was coded as a dummy variable (nonwhite = 0; white = 1), as was respondents' and focal children's gender (male = 0; female = 1) and marital status (not married = 0; married = 1). It should be noted that in the initial analyses, the race distribution was highly skewed; only nineteen respondents were nonwhite (15 blacks, 3 Hispanics, and 1 Native American). Respondents' and focal children's ages were recorded in years. Age of the focal child was dropped from the analyses because it was highly correlated ($r = .663$, $p \leq .0001$) with the parent's age.

In the initial analyses, place of residence was composed of a rural/urban continuum measured on a more refined scale ranging from (0) farm to (6) city of over

100,000 population. However, this variable was not correlated with any other variables in the correlation matrix. To control for sample stratification, we used a dichotomy of rural/urban (urban = 0; rural = 1). Because, as mentioned at the beginning of this chapter, gradations in the middle of the rural/urban continuum are not represented with the sampling procedures we used, this dichotomy is actually a better representation of the sample distribution than the more refined scale. The parents were asked about their own and the focal child's employment statuses. Responses were dichotomized into part-time, not employed and retired (coded 0) and full-time employment (coded 1). Note, however, that the parameter estimates for parental employment status are likely to be unstable due to small cell sizes; only twenty-seven elderly parents in this sample are still working full-time.

Parental income (both spouse and self) was arrayed into nine categories ranging from less than \$5,000 per year to more than \$100,000 per year. Sixty-eight respondents did not answer this question. Rather than dropping them from the analysis, we chose to substitute the mean score (3.5 or the corresponding category of \$15,001 to \$20,000 per year). To check against non-response bias, a dummy variable was created with a score of 1 when income was missing. The income missing variable was uncorrelated with any of the

variables in the model and was subsequently dropped from the analyses. Finally, education was recorded in years.

Table 6 reports the means, standard deviations, and ranges or codings for all variables used in the study.

Statistical Analyses

In addition to the univariate and factor analyses and reliabilities discussed above, statistical analyses of the data include, at the bivariate level, Pearson r correlations (with list-wise deletion) for all ordinal or higher level variables. At the multivariate level, path analysis (with list-wise deletion) was performed. Since one of the main goals of this study is to address the issue of causation in family solidarity models, path analysis is one of the appropriate statistical methods for analyzing theoretical causal or structural models.

As with other forms of structural analysis (i.e., Linear Structural Relations or LISREL), path analysis is concerned with studying causation among sets of variables, termed exogenous or source variables (variables which are external to the model) and endogenous or outcome variables (variables which have causal sources within the path diagram) or with the direct and indirect effects of certain variables on other variables (Pedhazur, 1982; Loehlin, 1987). The series of multiple regression equations that are produced as a result of path analysis are termed structural

Table 6: Means, Standard Deviations, and Ranges or Codings for Study Variables
(n = 313)

Variables	Mean	Std. Dev.	Range/Coding
<u>Functional Solidarity</u>			
Aid Given (GIVEAID):	1.77	1.60	0-6
Aid Received (GETAID):	1.52	1.31	0-5
Plans for Care (PLANCARE):	1.81	1.41	0-5
<u>Structural Solidarity</u>			
Number of Children and Grandchildren Family Members (FAMSIZE):	5.24	2.44	1-19
Proximity (PROX):	3.03	2.02	0 = > 500 miles; 7 = coresident
Parental Health (HEALTH):	2.11	.82	0 = poor 4 = excellent
<u>Normative Solidarity</u> (NORMSOL):	9.42	1.73	4-16
<u>Affectional Solidarity</u> (AFFECT):	8.35	1.08	2-9
<u>Associational Solidarity</u>			
Frequency of Contact: (CONTACT):	12.55	4.07	0-24

Table 6--continued

Variables	Mean	Std. Dev.	Range/Coding
<u>Sociodemographic Factors</u>			
Race (WHITE):	0.96	.20	0 = nonwhite 1 = white
Parent Gender (MOTHER):	0.65	.48	0 = father 1 = mother
Child Gender (DAUGHTER):	0.58	.49	0 = son 1 = daughter
Parent Marital Status (PMARRIED):	0.57	.96	0 = not married 1 = married
Child Marital Status (CMARRIED):	0.75	.52	0 = not married 1 = married
Residential Location (RURAL):	0.51	.50	0 = urban 1 = rural
Parent Age (AGE2)	73.00	6.18	65-98 (years)
Parental Employment Status (PEMLOYD):	0.08	.27	0 = not employed /retired 1 = employed full-time

Table 6--continued

Variables	Mean	Std. Dev.	Range/Coding
Child Employment Status (CEMPLOYD):	0.74	.44	0 = not employed retired 1 = employed full-time
Parental Income (INCOME)	3.57	1.83	In 10 categories: 0 = < \$5,000; 4 = \$20,001-30,000 9 = > \$100,000
Parent Education (EDUCATE)	12.82	2.49	2-20 (years)

equations and the parameters, structural parameters (Bentler, 1980). Path analysis, then, can test a hypothetical, theoretically-based model. The assumptions in path analysis are that the relations between variables in the model are additive, linear, and causal and, thus, exclude multiplicative, curvilinear, and interactive relations (Pedhazur, 1982).

The preliminary analyses include bivariate correlations. Each hypothesis will be examined with the correlations. These analyses are followed by the primary analysis, path analysis, which will test the formal hypotheses and the fit of the proposed path model as shown in Figure 2. In both types of analyses, two-tailed significance tests are used.

CHAPTER 4 RESULTS

Bivariate Correlations

The first step in the analysis is to examine the bivariate correlations for all variables in the model, in particular those involving the three dimensions of functional solidarity: aid that elderly parents give to a focal adult child (GIVEAID), aid received from the focal child by older parents (GETAID), and elderly parents' plans for care in the event of illness or infirmity (PLANCARE). The results from the correlation matrix, using list-wise deletion, are presented in Table 7.

The results from the bivariate correlations in Table 7 show cursory evidence in support of many of the hypotheses. Because of the large number of variables and hypotheses in the model, hypothesized findings will first be discussed in relation to the three outcome variables. Then, other correlations with the outcome variables within each of the elements in the proposed model and correlations between the predictor variables will be examined.

Table 7: The Matrix of Zero-Order Pearson Product-Moment Correlation Coefficients
(List-Wise Deletion) (n = 313)

VARIABLE	GIVEAID	GETAID	PLANCARE	FAMSIZE	PROX	HEALTH
GIVEAID	1.00					
GETAID		.285****	.130*	-.087	.319****	.003
PLANCARE		1.00	.183***	-.038	.332****	-.213****
FAMSIZE			1.00	.199****	.293****	.047
PROX				1.00	.106*	-.043
HEALTH					1.00	.016
NORMSOL						1.00
AFFECT						
CONTACT						
WHITE						
MOTHER						
DAUGHTER						
PMARRIED						
CMARRIED						
RURAL						
AGE2						
PEMPLOYD						
CEMPLOYD						
INCOME						
EDUCATE						

* = $p \leq .05$

** = $p \leq .01$

*** = $p \leq .001$

**** = $p \leq .0001$

Table 7--continued

VARIABLE	NORMSOL	AFFECT	CONTACT	WHITE	MOTHER	DAUGHTER
GIVEAID	.073	-.018	.337***	.070	-.118*	.059
GETAID	.163**	-.012	.316***	-.040	.141**	-.107*
PLANCARE	.249***	.036	.279***	-.074	.085	-.008
FAMSIZ	.029	-.032	-.034	-.203***	.047	-.073
PROX	.161**	-.039	.540***	-.019	-.010	-.137**
HEALTH	-.066	.109	-.065	.107*		
NORMSOL	1.00	-.036	.072	-.100*		
AFFECT		1.00	.082	.018		
CONTACT			1.00	.024		
WHITE				1.00		
MOTHER	-.100*	.137**	-.025	.050	1.00	-.095*
DAUGHTER	-.002	.050	.200***	.179***		1.00
PMARRIED	.076	.050	.043	.033		
CMARRIED	.032	-.023	-.052	-.046		
RURAL	.095*	.064	-.133**	.013		
AGE2	.084	.105*	-.086	-.021		
PEMPLOYD	.043	-.041	.062	-.060	-.193***	-.021
CEMPLOYD	.012	-.022	-.064	.060	.022	-.296**
INCOME	-.135**	-.064	.053	.069	-.285***	.121*
EDUCATE	-.090	-.052	-.106*	.037	-.144**	.014

Table 7--continued

VARIABLE	PMARRIED	CMARRIED	RURAL	AGE2	PEMPLOYD	CEMPLOYD
GIVEAID	-.129*	-.073	-.070	-.242***	.041	-.071
GETAID	.089	-.043	-.008	-.096*	-.031	.016
PLANCARE	.087	.058	-.045	-.063	.202***	-.040
FAMSIZE	-.003	.073	.197***	-.038	.120*	-.134**
PROX	.041	-.041	-.087	-.181***	.052	.021
HEALTH					-.026	.038
NORMSOL					.043	.012
AFFECT					-.041	-.022
CONTACT					-.062	.064
WHITE						
MOTHER	.291***	.041**	.008	.042		
DAUGHTER	-.053	-.061	-.078	-.002		
PMARRIED	1.00	.126*	.053	.288**		
CMARRIED		1.00	.075	.155**		
RURAL			1.00	-.039		
AGE2				1.00		
PEMPLOYD	-.093	-.044	-.077	-.187***	1.00	-.088
CEMPLOYD	.004	.048	-.047	-.154*		1.00
INCOME	-.351***	-.174***	-.212***	-.280***		
EDUCATE	-.074	.013	-.119*	-.007		

Table 7--continued

VARIABLE	INCOME	EDUCATE
GIVEAID	.214***	-.022
GETAID	-.156*	-.095*
PLANCARE	-.059	-.142**
FAMSIZE	-.129*	-.238***
PROX	.068	-.173**
HEALTH	.168***	.119*
NORMSOL	-.135**	-.090
AFFECT	-.064	-.052
CONTACT	.053	-.106*
WHITE		
MOTHER		
DAUGHTER		
PMARRIED		
CMARRIED		
RURAL		
AGE2		
PEMPLOYD	.016	-.023
CEMPLOYD	-.026	.066
INCOME	1.00	.279***
EDUCATE		1.00

Functional Solidarity

We hypothesized positive relationships between giving aid to (GIVEAID) and receiving aid from (GETAID) a focal child and plans for care (PLANCARE). Both of these hypotheses are supported at the bivariate level. Parents who give more aid to a focal child are more likely to select a child over other family members or social agencies in terms of plans for care ($r = .130, p \leq .05$) and parents who receive more aid from a focal child expect help from a child rather than others ($r = .183, p \leq .001$).

Associational Solidarity

Most hypotheses regarding correlations with associational solidarity (CONTACT) and functional solidarity are supported. Associational solidarity is positively related to giving aid a focal child ($r = .337, p \leq .0001$), receiving aid from a focal child ($r = .316, p \leq .0001$), and to expecting children, rather than social agencies or other family members, to help with parental care ($r = .279, p \leq .0001$).

Affectional Solidarity

It was hypothesized that affectional solidarity (AFFECT) would be positively correlated with giving aid to a focal child, receiving aid from a focal child, and with expecting help from children, as opposed to others. None of

these hypotheses are supported at the bivariate level; that is, affectional solidarity is not associated with any of the forms of functional solidarity.

Contrary to our hypothesis, affectional solidarity and associational solidarity are not correlated. Older parents who feel more affection for the focal child have no more contact with that child than older parents who feel less affection.

Normative Solidarity

Only one of the hypotheses involving normative solidarity (NORMSOL) and functional solidarity is supported. As expected, the association between normative solidarity and plans for care is positive at the bivariate level ($r = .249$, $p \leq .0001$). Thus, higher filial expectations are correlated with higher parental expectations for assistance from children, rather than from social agencies and other family members. Normative solidarity is not associated with giving aid to the focal children and, while no relationship was expected between normative solidarity and receiving aid from focal children, a positive correlation is found ($r = .163$, $p \leq .01$). These findings are in direct opposition to earlier research with similar concepts (Lee et al., 1994b). We also expected that normative solidarity would be positively correlated with affectional solidarity. This hypothesis receives no support.

Other hypotheses relating normative solidarity to other elements in the family solidarity model were not supported. Having higher filial responsibility expectations does not lead to higher levels of affectional solidarity or associational solidarity.

Structural Solidarity

In terms of the correlations between aid older parents give to a focal child and the measures for structural solidarity, number of family members (FAMSIZE), proximity to the focal child (PROX), and parental health (HEALTH), there is a positive association between giving aid to the focal child and proximity to the focal child ($r = .319, p \leq .0001$); that is, as expected, parents in this sample who live close to or with the focal child give more aid to that child. The size of the elderly parent's family and parental health are uncorrelated with giving aid to a focal child, contrary to our hypotheses.

Receiving aid from a focal child is positively correlated with two of the structural solidarity variables. First, older parents who live close to a focal child receive more aid from that child ($r = .332, p \leq .0001$). Second, older parents in poorer health also receive more help from the focal children ($r = -.213, p \leq .0001$). Both findings support our hypotheses for those variables. However, our hypothesis that family size would be positively correlated

with receiving aid from a focal child is not supported; there is no association between the size of an elderly parent's family and the receipt of aid from focal children.

Two of the hypotheses regarding elderly parents' plans for care and the structural solidarity variables are supported. We anticipated a positive correlation between family size and parents planning on help from their children. At the bivariate level of analysis, the correlation is indeed positive ($r = .199, p \leq .0001$); that is, older parents with larger numbers of children have higher expectations for help from those children and parents with smaller numbers of children from social agencies or family members other than children. The association between proximity to a focal child and plans for care was hypothesized in the positive direction. As expected, the actual correlation is positive ($r = .293, p \leq .0001$) indicating that parents who live closer to the focal child plan for help from them and parents who live greater distances from the focal child plan for help from social agencies and other family members. Contrary to our hypotheses, parental health is unassociated with plans for care and with normative solidarity.

Of all of the bivariate correlations in the matrix, the association between proximity to a focal child and contact with a focal child (associational solidarity) is the strongest ($r = .540, p \leq .0001$). Thus, as we hypothesized,

parents who live closer to the focal child have more contact with the child than do parents who live greater distances from that child. Contrary to our hypothesis, proximity and affectional solidarity are not related.

Family size is unassociated with normative solidarity, as hypothesized. We also hypothesized that older parents with more proximate children would have higher levels of normative solidarity. In support of that hypothesis, the bivariate correlation shows that normative solidarity and proximity are positively correlated ($r = .161, p \leq .01$). This is in direct contrast to previous research (Lee et al., 1994a) which shows that proximity to focal children and normative solidarity are not related. Perhaps older parents in this sample are not as able to separate abstract notions of filial responsibility expectations from their own particular situations as previously thought.

Sociodemographic Factors

Contrary to our hypothesis, whites (WHITE) are no more likely than nonwhites to report higher levels of aid giving to a focal child or to receive aid from that child nor to select a child, as opposed to others, in plans for care. We had expected that older white parents would have higher filial responsibility expectations. However, in this sample of older parents, nonwhite elders have higher levels of normative solidarity ($r = -.100, p \leq .05$). And, our

hypothesis that older nonwhite parents would have more contact with focal children than older white parents receives no support. Most likely, the small number of nonwhites in the sample affected these results. While not part of our hypothesize relationships within the family solidarity model, elderly nonwhite parents do tend to have larger families than older white parents ($-.203, p \leq .0001$).

As expected, parent's gender (MOTHER) is significantly correlated with giving and receiving aid; older fathers are more likely to give assistance to a focal child ($r = -.118, p \leq .05$) and older mothers are more likely to receive it ($r = .141, p \leq .01$). We expected that older mothers, rather than older fathers, would be more likely to select a child when thinking about plans for care. This is not supported; mothers are no more likely to expect help from children than are fathers. Contrary to previous research which finds that older women have higher norms of filial responsibility, in this sample of elders, older fathers have higher levels of normative solidarity ($r = -.100, p \leq .05$).

We hypothesized that female focal children (DAUGHTER) would be more likely to receive aid from older parents, to give aid to older parents, and to be selected more often than male children in terms of plans for care. None of the correlations are found. Gender of the focal child is not associated with giving aid to the child or with a parent's plans for care; male focal children are more likely to give

aid to older parents than are female focal children ($r = -.107$, $p \leq .05$). However, consistent with our hypothesis, the bivariate results indicate older parents have more contact with a female focal child than with a male focal child ($r = .200$, $p \leq .0001$).

Married parents (PMARRIED) are less likely to give aid to a focal child than are unmarried parents, contrary to our hypothesis ($r = -.129$, $p \leq .05$). We also expected that unmarried parents would be more likely to receive aid from focal children than married parents. This hypothesis also receives no support. We expected no associations between parent marital status and associational solidarity or plans for care and none were found. Additionally, there is no correlation between parental marital status and normative solidarity, contrary to our expectations. We hypothesized that married focal children (CMARRIED) would receive less aid from parents than unmarried focal children; however, we found that focal child's marital status is not associated with receipt of aid from older parents. We also expected that married focal children would have less contact with older parents than unmarried focal children. This hypothesis is not supported; there is no correlation between the focal children's marital status and associational solidarity.

As anticipated, parent's age (AGE2) is negatively correlated with giving aid to a focal child ($r = -.242$, $p \leq$

.0001) and positively associated with receiving aid from a focal child ($r = .096$, $p \leq .05$). However, older parents, who would be more likely to need help from children, are more likely to live farther from their children than are younger parents ($r = -.181$, $p \leq .001$).

We hypothesized that older parents would be more likely to expect children to help them if they needed it than would younger parents. This is not supported; there is no association between parent's age and plans for care. A possible explanation for this finding can be attained from those who argue for research which separates generational effects from cohort effects (e.g., Mancini & Blieszner, 1989; Moge, 1991). We argued that old-old parents, because of increased risks of infirmity and frailty, may have an increased concern about plans for their care than would young-old parents. Equally likely, however, could be a cohort effect such that old-old parents, because of the time they were living and working as young adults (i.e., the Depression) may place far more importance on independence and not being a burden to their children than do young-old parents. While the focus of this study was not on cohort effects, they certainly warrant further investigation. As expected, older parents do have higher levels of affection for the focal child than do younger parents ($r = .105$, $p \leq .05$), but contrary to our hypothesis, there is no

relationship between parent's age and associational solidarity or normative solidarity.

Employed parents (PEMPLOYD) were expected to be more likely to give aid to a focal child, less likely to receive such assistance from a focal child, and less likely to plan for help from a child rather than others. The giving and receiving of aid is not correlated with parent's employment status. However, employed parents are more likely to plan for care from children than are unemployed parents ($r = .202, p \leq .0001$). Contrary to our hypotheses, focal child's employment status (CEMPLOYD) is unassociated with receiving aid from or giving aid to an older parent, and with the parent's expectations for care.

We hypothesized that older urban parents would have lower levels of affection for the focal child and higher levels of associational solidarity and intergenerational exchanges of aid with the focal child than older rural parents, and that these rural parents would be more likely to choose a child when contemplating plans for care than would elderly urban parents. Only one of these hypotheses is supported. As hypothesized, area of residence (RURAL) is negatively correlated with associational solidarity, such that urban elderly parents have more contact with focal children than do rural elderly parents ($r = -.133, p \leq .001$). Area of residence is uncorrelated with affectional solidarity and all of the forms of functional solidarity.

Rural parents have no higher levels of affectional solidarity or functional solidarity than urban parents, contrary to our hypotheses.

While not hypothesized, compared to urban parents, rural parents do have larger families ($r = .197, p \leq .0001$), lower incomes ($r = -.212, p \leq .0001$), and lower educational levels ($r = -.119, p \leq .05$).

Outcomes for the bivariate correlations between the resource variables, parental income (INCOME) and parental education level (EDUCATE), and the functional solidarity variables were, for the most part, not as hypothesized. Only the correlation between income and giving aid to a focal child was as we anticipated; that is, higher parental income is associated with giving more aid to a focal child ($r = .214, p \leq .0001$).

Contrary our hypothesis and to other research (Mutran & Reitzes, 1985; Lee et al., 1993), which found no association between income and aid received from children, among this sample of elderly parents, income is negatively related to aid received ($r = -.156, p \leq .05$). Thus, older parents who have lower incomes receive more help from their children. This may be especially true for older mothers who are more likely to have lower incomes than are older fathers ($r = -.285, p \leq .0001$). And, parents with lower incomes are no more likely to choose a child for assistance than are parents with higher incomes, contrary to our expectations.

With regard to income and filial responsibility expectations, as we hypothesized, older parents with lower incomes do have higher levels of normative solidarity ($r = -.135, p \leq .01$).

Similar to income, we expected that parents with higher educational levels would give more aid to a focal child. The bivariate results, however, indicate that these two variables are uncorrelated. We also hypothesized that parent educational levels would not be associated with receiving aid from a focal child; this is not supported and, as with income, education is negatively correlated with aid received ($r = -.095, p \leq .05$). Again, this may be because of the lower educational levels of older mothers in this sample compared to older fathers ($r = -.144, p \leq .01$), as well as the higher contact that parents with lower education levels have with their children ($r = -.106, p \leq .05$). We expected that parents with higher educational levels would be less likely to choose a child for assistance, if needed in the future, and this is supported; parents with higher educational levels are more likely to choose others for help than are parents with lower education levels ($r = -.142, p \leq .01$). Finally, we had hypothesized that older parents with lower levels of education would have higher levels of normative solidarity. The bivariate results indicate that there is no relationship between filial responsibility

expectations and education among this sample of elderly parents.

With the exception of affectional solidarity, overall, the bivariate correlations indicate that there is empirical support for the proposed family solidarity model. That is, several of the sociodemographic factors (parent employment status and educational level), family size and proximity to a focal child (structural solidarity), normative solidarity, associational solidarity, giving aid to and receiving aid from a focal child are all associated with older parents' plans for care. The path analyses will provide further evidence into these relationships, including the direct, indirect, and noncausal effects. This analysis will demonstrate how the various predictor variables affect each other and the outcome variables, giving us clues as to the credibility of our family solidarity model. Additionally, by investigating all relationships at the bivariate level again at the multivariate level, we can also check for the effects of suppression.

Path Analyses

Path analysis was used to test the proposed model in Figure 2 because of our specific interest in the structural ordering of the variables in that model. A separate path model was constructed for each outcome measure. A series of multiple regression equations was calculated, regressing

plans for care, parental aid given to the focal child, and parental aid received from the focal child on the predictor variables. Then, each endogenous predictor was regressed on all antecedent predictors.

All coefficients reported in the following tables are standardized coefficients (i.e., betas). Indirect effects were calculated by multiplying and adding the direct paths from each predictor variable to each of the three outcome variables. Additionally, indirect effects will not be discussed unless they are larger than .05 or are part of a hypothesized relationship. Noncausal effects were calculated by adding direct and indirect effects together and subtracting the result from the corresponding total effects. Total effects are the sums of the direct, indirect, and noncausal effects for each variable in the models (and are equivalent to the corresponding correlation coefficient). As with the correlations, missing data due to item nonresponse were dealt with through list-wise deletion, resulting in a modest ($n = 49$ or 13.5% of the sample) loss of cases within each of the regression models.

Table 8 presents the decomposition of the effects of the predictor variables on older parents' plans for care. While the significance levels decreased from the bivariate correlation analysis, the strongest predictor of plans for care, in terms of direct effects, is normative solidarity ($B = .216$, $p \leq .0001$), followed by parents' employment status

Table 8: Effects of Predictor Variables on Plans for Care (n = 313)

Predictor Variables ^a	Total Effects (r)	Direct Effects (Beta)	Indirect Effects	Noncausal Effects
WHITE	-.074	-.074	-.004	-.053
MOTHER	.085	.106*	-.037	.016
DAUGHTER	-.008	-.011	.047	-.044
PMARRIED	.087	.045	.015	.027
CMARRIED	.058	.074	.002	-.018
AGE2	-.063	-.042	.018	-.039
PEMLOYD	.202***	.192***	-.001	.011
CEMLOYD	-.040	-.043	-.008	.011
RURAL	-.045	-.087	-.008	.050
INCOME	-.059	.009	-.025	-.043
EDUCATE	-.142**	-.041	-.009	-.092
PROX	.293***	.084	.165	.044
FAMSIZE	.199***	.163**	.019	.055
HEALTH	.047	.093*	-.040	-.006
NORMSOL	.249***	.216***	.000	.033
AFFECT	.036	.031	.017	-.012
CONTACT	.279***	.170**	.016	.093
GETAID	.183***	.078	---	.105
GIVEAID	.130*	.018	---	.112

Intercept = -.277

 $R^2 = .251$

F, p-value = 5.15, .0000

^a. See Table 6 (pp. 103-105) for variable definitions.

* < .05

** < .01

*** < .001

**** < .0001

($B = .192$, $p \leq .0001$), associational solidarity ($B = .170$, $p \leq .01$), and one of the structural solidarity variables, family size ($B = .163$, $p \leq .01$).

These direct effects suggest that older parents who have frequent contact with a focal child, have high filial responsibility expectations, have larger families, and are employed are more likely to choose a child for help, if needed, than others. Generally, the findings support our hypothesized direct relationships between these variables and plans for care. In terms of employment status, however, we expected that employed parents would be less likely to plan for help from a child and more likely to plan for help from others or more formal services. In spite of the few numbers of elderly parents who are still working full-time, the differences between employed and unemployed older parents are large enough to be significant, and, it is not altogether clear as to why employed older parents might plan for care from a focal child.

The hypothesized positive relationships between the exchange forms of functional solidarity (aid given by parents to a focal child and aid received from those children) and selecting a child for help are not supported at the multivariate level. Thus, even though giving aid to a focal child and receiving aid from a focal child are associated with plans for care at the bivariate level, most of the effects at the multivariate level seem to be

noncausal (.105 and .112, respectively). Because aid given and aid received have no effects on plans for care, the hypothesized indirect effects of associational solidarity, normative solidarity, and family size (structural solidarity) on plans for care, through the exchange forms of functional solidarity, cannot be supported. Additionally, there are no significant direct or indirect paths between affectional solidarity and plans for care, contrary to our hypotheses.

We had also hypothesized that parents in poorer health would more often plan for care from children rather than others and that the relationship between proximity to a focal child (structural solidarity) and an older parent's plans for care would be mediated by contact with the focal child (associational solidarity) and normative solidarity. Contrary to our hypothesis, health has no direct effect on plans for care. In terms of proximity, Table 8 shows high total effects (.293, $p \leq .0001$ and .249, $p \leq .0001$, respectively) with most of the impact of proximity on plans for care being indirect (.165) through associational solidarity. Indeed, proximity to the focal child has a strong positive effect on associational solidarity ($B = .585$, $p \leq .0001$, see Table 10) indicating that parents and children who live closer to or with each other have more contact than those who live at greater distances from each other.

An issue that arose in the previous chapter concerns the possible confounding of coresidence on plans for care. As discussed in that chapter, we created a coresidence dummy variable (coresidence = 1) and ran a plan for care multiple regression model with the coresidence dummy variable replacing the proximity variable. Similar to the comparison of the means, examined in the previous chapter, where elderly parents who coresided with a focal child had lower mean scores on plans for care (corresponding to planning for care from someone other than children) than elders who lived in close proximity to the focal child, the multivariate results here show that older parents who live with a focal child are less likely to plan for care from their children than those who do not coreside with a focal child ($B = -.147, p \leq .009$). While purely speculative in nature, a possible explanation for this interesting finding may be that older parents who live with children may find this experience to be demoralizing to them because of a loss of independence and may see themselves as a burden on the coresident child. Therefore, plans for care from someone other than children may represent a wish or desire on the part of older parents who coreside with children.

An added concern is that coresidence with a focal child might have influenced contact with focal children and the aid older parents receive from focal children, in turn, affecting the relationship between aid received and plans

for care. The significance level of the effect of the contact on plans for care increased slightly to the .001 level ($B = .213$) with the coresidence dummy variable (versus the proximity variable with a significance level of .01) in the model. However, the coresidence dummy variable has no significant effect on the relationship between aid received and plans for care ($B = .093$, $p \leq .08$).

In terms of the remaining sociodemographic factors, there are no significant paths from race, gender of the focal child, marital statuses of the parent and child, parental age, focal child's employment status, parental area of residence, and parental income and educational levels to older parents' plans for care, though the effects of race and education on plans for care do seem to be somewhat noncausal ($-.053$ and $-.092$, respectively). Thus, our hypotheses with respect to these predictor variables and plans for care are not supported. Moreover, the bivariate correlation between education and plans for care disappears at the multivariate level.

In sum, the results from regressing the predictor variables on older parents' plans for care provide modest support for the effects of family solidarity on the expectations that elders have for care in the event of infirmity. While the model explains 25.1 percent of the variation in plans for care and the variables, as a whole, are good predictors ($F = 5.15$, $p \leq .0001$) of plans for care,

most of the effects are direct from associational solidarity, normative solidarity, the size of the elderly parent's family, and the elder's employment status (employed) to plans for care. Only one significant effect is primarily indirect, from proximity through associational solidarity to plans for care.

Decomposition of the effects of the predictor variables in the model on aid older parents give to their focal children is shown in Table 9. Again, in some cases, even though the significance levels decreased from the bivariate to the multivariate level, several of our hypotheses are supported.

Associational solidarity has the strongest direct effect on aid given ($B = .221$, $p \leq .0001$) lending support to our hypothesis that this form of functional solidarity depends on contact with children. As previous research has shown (Rossi & Rossi, 1990), parents who have more contact with their children provide more assistance to them.

Additionally, as hypothesized, other significant direct effects on parental aid given to focal children are parental age ($B = -.172$, $p \leq .01$) and proximity to a focal child ($B = .160$, $p \leq .01$). Younger parents are more likely to provide assistance to the focal child than are older parents and parents who live closer to or with the focal children give more aid to them than parents who live at greater distances from their children. As with plans for care, there is also

Table 9: Effects of Predictor Variables on Parental Aid Given to Focal Child (n = 313)

Predictor Variables ^a	Total Effects (r)	Direct Effects (Beta)	Indirect Effects	Noncausal Effects
WHITE	.070	.060	-.004	.014
MOTHER	-.118*	-.057	-.016	-.045
DAUGHTER	.059	.033	.059	.033
PMARRIED	-.129	-.050	.013	-.092
CMARRIED	.073	.009	-.002	-.080
AGE2	-.242***	-.172**	.006	-.076
PEMPLOYD	.041	-.010	----	.051
CEMPLOYD	-.071	-.106*	----	.035
RURAL	-.070	.016	-.011	-.075
INCOME	.241***	.116*	-.009	.107
EDUCATE	-.022	-.026	-.002	.006
PROX	.319***	.160**	.140	.019
FAMSIZE	-.087	-.101**	-.015	.029
HEALTH	.003	.004	-.024	.023
NORMSOL	.073	.066	-.007	.014
AFFECT	-.018	.002	.023	-.043
CONTACT	.337***	.221***	----	.116

Intercept = 3.66

R² = .227

F, p-value = 5.09, .0000

^a See Table 6 (pp. 103-105) for variable definitions.

* < .05

** < .01

*** < .001

**** < .0001

an indirect positive effect of proximity to a focal child on giving aid to them through associational solidarity. Much of the impact of the high total effect (.319, $p \leq .0001$) is indirect (.140) through contact with the focal child ($B = .585$, $p \leq .0001$, see Table 11.

Affectional and normative solidarity have no effects on parental aid to focal children; thus, our hypothesized direct and indirect relationships between these variables are not supported.

Apart from proximity to focal children, the only other form of structural solidarity that has a direct effect on aid given to a focal child by older parents is family size ($B = -.101$, $p \leq .05$). As hypothesized, parents with smaller families give more aid to children than those with larger families. Parental health has no significant direct or indirect path to the aid older parents give to their focal children. We did not hypothesize any relationship between parental health and aid given to a focal child and none was found.

We had also expected that gender and marital statuses of the older parents and their focal children would affect aid given those children. These hypotheses received minimal support at the bivariate level. Older fathers do give more to the focal child, but so do unmarried parents; gender and marital status of the focal children were uncorrelated with aid given to them by parents. At the multivariate level,

there are no direct paths (though there are some noncausal effects, $-.092$ and $-.080$, respectively) between these variables and aid given to focal children and the correlations between aid given and both parental gender and marital status are eliminated, due to either an indirect effect or a spurious association from a third variable.

One indirect effect was found between gender of the focal child and aid given, through associational solidarity. As hypothesized, there is a strong positive effect of focal child's gender on contact ($B = .267$, $p \leq .0001$, see Table 11) and of contact on aid given ($B = .221$, $p \leq .0001$, Table 9). Thus, female focal children have more contact with older parents than male focal children, in turn increasing the aid they receive from parents.

Two of the sociodemographic variables were found to have direct effects on parental aid given to focal children by older parents, lending support to the applicable hypotheses. The employment status of the focal child has a negative effect on the aid they are given by parents. Focal children who are not employed receive more aid from parents than employed focal children ($B = -.106$, $p \leq .05$). Income has a positive effect on the aid focal children receive from their older parents. Parents with higher incomes are more likely to give help to the focal child than parents with lower incomes ($B = .116$, $p \leq .05$).

The remaining sociodemographic variables provide no support for our hypotheses with parental aid given to focal children. Thus, race, parental employment statuses, where the parent resides, and parental education levels have no effects, either direct or indirect, on aid the focal children receive from their older parents. Some of the effects of parental employment status and residence on aid given to a focal child does appear to be noncausal (.051 and -.075, respectively).

The model for giving aid to focal children receives some support with respect to family solidarity factors. Nearly 23 percent of the variation in aid given to focal children by elderly parents is explained by the variables in this model. The F statistic indicates that these predictor variables collectively have a statistically significant effect on aid that adult focal children receive from elderly ($F = 5.09, p \leq .0000$). In addition to the age of the parent, associational solidarity and proximity to a focal child (structural solidarity) are the strongest predictors of aid children might receive from elderly parents. Family size, focal children's employment status, and parental income are also significant, though weaker, predictors of aid given to a focal child. All of these effects seem to be primarily direct. As with plans for care, however, associational solidarity also operates indirectly (in a positive direction) to mediate the relationship of proximity

to a focal child on giving aid to children. Additionally, focal daughters receive more help from older parents because of the increased contact they have with parents. These findings provide some support for this model of family solidarity.

Other dimensions of family solidarity, such as normative solidarity, affectional solidarity, and the other forms of structural solidarity (family size and parental health), as well as many of the sociodemographic factors, do not affect, directly or indirectly, the aid older parents give to their children and, thus, our hypotheses for those factors are unsupported.

In Table 10, the effects of regressing the predictor variables on the aid parents receive from adult focal children are shown. There are significant direct paths, as hypothesized, from associational solidarity, two forms of structural solidarity (proximity and parental health), gender, age, and income of the parents to the aid elderly parents receive from the focal children. Parents who have more contact with focal children ($B = .160, p \leq .01$), live with or close to the focal children ($B = .190, p \leq .001$), who are in poorer health ($B = -.179, p \leq .001$), have lower incomes ($B = -.121, p \leq .05$), are older ($B = .172, p \leq .001$), and are mothers ($B = .153, p \leq .01$) are more likely to receive assistance from focal children.

Table 10: Effects of Predictor Variables on Parental Aid Received from Focal Child
(n = 313)

Predictor Variables ^a	Total Effects (r)	Direct Effects (Beta)	Indirect Effects	Noncausal Effects
WHITE	.040	-.028	-.003	.071
MOTHER	.141**	.153**	-.016	.004
DAUGHTER	-.107*	-.086	.043	-.064
PMARRIED	.089	-.020	.011	.098
CMARRIED	-.043	-.075	-.001	.033
AGE2	.096*	.172**	.003	-.079
PEMPLOYD	-.031	-.013	----	-.018
CEMPLOYD	.016	.034	----	-.018
RURAL	-.008	.013	-.011	-.010
INCOME	-.156***	-.121*	-.011	-.024
EDUCATE	-.095**	.031	-.003	-.123
PROX	.332***	.190***	.107	.035
FAMSIZE	-.038	-.051	-.009	.022
HEALTH	-.213***	-.179***	-.019	-.015
NORMSOL	.163**	.078	-.003	.088
AFFECT	-.012	-.034	.017	.005
CONTACT	.316***	.160**	----	.156

Intercept = -.102

R² = .305F, p-value = 7.15, $\leq .0001$ ^a. See Table 6 (pp. 103-105) for variable definitions.

* < .05

** < .01

*** < .001

**** < .0001

Proximity to a focal child is the strongest predictor of aid that parents receive from children and this variable also shows a significant indirect effect on aid received through associational solidarity. Interestingly, the significance level of the correlation between parental age and aid received from children increased from the bivariate to the multivariate level. At constant levels of other variables, age has a fairly substantial effect on the aid these older parents receive from the focal children. A return to the correlation matrix in Table 7 suggests an explanation for how this suppression occurred. Proximity to a focal child is negatively correlated with parental age ($r = -.181$, $p \leq .001$) and is positively correlated with aid received from focal children ($r = .332$, $p \leq .0001$). Older parents tend to live greater distances from their children than younger parents, but they are also more likely to need help as they age. Thus, proximity to a focal child suppresses the effect of parental age on aid received from that child.

Our hypotheses about direct and indirect effects with regard to affectional solidarity, normative solidarity and aid received by elderly parents from focal children are not supported. Most of the effects of regressing aid received on normative solidarity appears to be noncausal (.088). The remaining structural solidarity measure, family size, is not related to aid received and our hypothesis is rejected; the

size of the elderly parent's family has no direct or indirect effect on the aid they might receive from their children.

Contrary to our hypotheses, the remaining sociodemographic variables did not produce any significant direct or indirect paths to aid received from children. Thus, nonwhite, unmarried, employed, and rural elderly parents are no more likely to receive assistance from children than their counterparts. Similarly, employed and unmarried focal children give no more aid to their elderly parents than do unemployed and married children.

Reviewing the results from the model in Table 10 for parental aid received from focal children, we can see that several of our hypotheses were supported, lending some credence to the proposed family solidarity model. This model explains 30.5 percent of the variation in aid received from focal children; the F statistic is 7.15 and is statistically significant at the .0001 level, indicating the combined significant effect of this group of predictors on the aid parents receive from focal children. Again, as with the previous models, associational solidarity has both direct and indirect (through proximity) effects on the aid that older parents receive from the focal child; older parents who live in close proximity to a focal child have more contact with that child, which in turn serves to increase the aid these parents will receive from focal

children. Structural solidarity also receives some support; parents who are in poorer health and who live close to or with the focal children receive more assistance from them.

Direct sociodemographic influences on aid received are gender and parental age and income; mothers and parents who are older and have lower incomes are more likely to receive aid from focal children than are fathers and those parents who are younger and have higher incomes. Proximity to the focal child exerts an indirect effect on the aid that parents receive from those children through contact with children (associational solidarity); parents who live closer to or with a focal child have more contact with that child, thereby increasing the aid they receive from that focal child. Contrary to our hypotheses, normative and affectional solidarities, family size (a measure of structural solidarity), and the remaining sociodemographic factors have no direct or indirect influences on the assistance older parents might receive from a focal child.

Table 11 is a decomposition of the model that predicts associational solidarity. Here, we can see, as with the bivariate correlations, that adult focal daughters are more likely to have contact with an elderly parent than are adult focal sons ($B = .267, p \leq .0001$) and that older parents who live in close proximity to focal children are more likely to have contact with them than less proximate parents ($B = .585, p \leq .0001$). These effects appear to be direct. These

Table 11: Effects of Predictor Variables on Associational Solidarity (n = 313)

Predictor Variables ^a	Total Effects (r)	Direct Effects (Beta)	Indirect Effects	Noncausal Effects
WHITE	.024	-.020	----	.044
MOTHER	-.025	-.028	.004	-.001
DAUGHTER	.200***	.267***	----	-.067
PMARRIED	.043	.048	-.001	-.004
CMARRIED	-.052	-.007	----	-.045
AGE2	-.086	-.004	.009	-.091
RURAL	-.133**	-.059	.008	-.082
PROX	.540***	.585***	-.006	-.039
FAMSIZE	-.034	-.062	-.004	.032
HEALTH	-.065	-.100*	.001	.034
NORMSOL	.072	-.025	-.005	.102
AFFECT	.082	.106*	----	-.024

Intercept = 15.27

R² = .397

F, p-value = 16.48, ≤ .0001

^a. See Table 6 (pp. 103-105) for variable definitions.

* < .05

** < .01

*** < .001

**** < .0001

findings do not suggest that all daughters or all proximate children have more contact with older parents, only that focal daughters and proximate focal children have more contact with their elderly parents.

Interestingly, when other factors are held constant, the effects of parental health ($B = -.100$, $p \leq .05$) and affectional solidarity ($B = .106$, $p \leq .05$) on associational solidarity become significant at the multivariate level. These are certainly not strong effects; nonetheless there is a tendency for older parents who are in poorer health and who have higher levels of affection for the focal children to have more contact with those children. These relationships were apparently suppressed by other variables in the model, at the bivariate level.

While significant at the bivariate level, the negative relationship between residence and contact disappears at the multivariate level, due to noncausal effects ($-.082$) of other variables in the model. Thus, our hypothesis with respect to area of residence and associational solidarity is not supported. As expected, marital status of the parent has no effect on associational solidarity. Race, gender of the parent, marital status of the focal children, parental age, family size, and normative solidarity contrary to our hypotheses, have no direct or indirect effects on contact between older parents and the focal children at the multivariate level.

In Table 11, the strongest predictor of associational solidarity is proximity to a focal child, followed by being a daughter, high levels of affectional solidarity, and poor health. Other sociodemographic factors in the model apparently have no direct or indirect effects on associational solidarity. This model explains 39.7 percent of the variation in associational solidarity, most probably due to the strong direct relationship between proximity to a focal child and contact. Collectively, the predictor variables in the model have statistically significant influences on associational solidarity ($F = 16.49$, $p \leq .0001$).

Table 12 presents the results of the path analysis for affectional solidarity. Only one of the variables in the model is significantly related to our measure of the affection that an older parent feels for the focal child.

At the bivariate level, parents' age was positively correlated with affectional solidarity; that is, older parents have more affectionate feelings toward a focal child than younger parents. This relationship holds at the multivariate level ($B = .105$, $p \leq .05$).

The predictor variables in this model explain only about 2 percent of the variation in affectional solidarity and, as a group, are not significant predictors of the affection older parents perceive in their relationships with children ($F = 1.17$, $p \leq .323$).

Table 12: Effects of Predictor Variables on Affectional Solidarity (n = 313)

Predictor Variables ^a	Total Effects (r)	Direct Effects (Beta)	Indirect Effects	Noncausal Effects
AGE2	.105*	.105*	-.003	.003
RURAL	.064	.072	----	-.008
PROX	-.039	-.002	-.009	-.028
FAMSIZE	-.032	-.040	----	.008
NORMSOL	-.036	-.050	----	.014
Intercept = 58.90				
R ² = .019				
F, p-value = 1.17, .323				

^a. See Table 6 (pp. 103-105) for variable definitions.

* < .05
 ** < .01
 *** < .001
 **** < .0001

Finally, the results of the direct effects of the predictor variables on normative solidarity are presented in Table 13.

Consistent with the bivariate correlations, we can see that parent's gender ($B = -.152, p \leq .01$), income ($B = -.137, p \leq .05$), and proximity to a focal child ($B = .177, p \leq .01$) are significant predictors of filial responsibility expectations among older parents. Fathers, elderly parents with lower incomes, and elders who live close to the focal children have higher levels of normative solidarity than do mothers, parents with higher incomes, and elders with less proximate focal children. Note, however, that the finding of a negative relationship between gender and normative solidarity is in direct contrast to previous research that finds that females have higher norms of filial responsibility (Seelbach, 1977; Blieszner & Mancini, 1987) or that there is no relationship between gender and normative solidarity (Lee, Coward, & Netzer, 1994; Lee et al., 1994b).

Other measures of structural solidarity, family size and parental health, are not significantly related to normative solidarity nor is parental race, marital status, age, and educational levels.

Collectively, these variables are significant predictors of normative solidarity ($F = 3.06, p \leq .002$) and

Table 13: Effects of Predictor Variables on Normative Solidarity (n = 313)

Predictor Variables ^a	Total Effects (r)	Direct Effects (Beta)	Indirect Effects	Noncausal Effects
WHITE	-.100*	-.080	----	-.020
MOTHER	-.100*	-.152**	----	.052
PMARRIED	.076	.046	----	.030
AGE2	.084	.066	----	.018
INCOME	-.135**	-.137*	----	.002
EDUCATE	-.090	-.038	----	-.052
PROX	.161**	.177**	----	-.017
FAMSIZE	.029	-.025	----	.054
HEALTH	-.066	-.029	----	-.037

Intercept = 10.36

R² = .083

F, p-value = 3.06, .002

^a. See Table 6 (pp. 103-105) for variable definitions.

* < .05

** < .01

*** < .001

**** < .0001

explain 8.3 percent of the variation in this dependent variable.

CHAPTER 5 DISCUSSION AND CONCLUSIONS

Overview of the Problem

The present study is taken from earlier research and theory development that was designed to formulate a model and theory of family solidarity (Atkinson et al., 1986; Bengtson et al., 1976; Bengtson & Roberts, 1991; Mangen et al., 1988; Roberts & Bengtson, 1990). The theory proposes several dimensions that are crucial to intergenerational cohesion in later life families. The dimensions included in this study are (1) the amount of intergenerational exchange of aid that older parents experience (functional solidarity); (2) frequency of contact and shared activities between older parents and their adult children (associational solidarity); (3) the affective sentiments that older parents attach to their relations with children (affectional solidarity); (4) the filial responsibility expectations that older parents have (normative solidarity); and (5) the opportunity structures for interaction of older parents through such circumstances as family size, parental health, and proximity to children (structural solidarity). We also included a number of characteristics of the older parents and their adult children, such as age, gender, race,

marital status, area of residence, income, and education, that have been found to influence family solidarity. In a departure from the original theory, we added a third unique component to functional solidarity as the major outcome of family solidarity. We termed this element "plans for care" and defined it as the expectations that older parents have for assistance or caregiving from their children, in the event of illness or infirmity.

Based on these concepts, the main purpose of this study was to investigate the direct and indirect effects of intergenerational exchanges of aid, associational, affectional, normative, and structural solidarity dimensions of the theory of family solidarity, as well as the sociodemographic influences on older parents' plans for care, in the event they should need such help. We conducted our investigation with a sample of 362 elderly parents residing in Kansas through telephone interviews. The parents identified a focal child that helps them the most or that they see the most. Correlations and path analyses were used to test the hypotheses and a proposed family solidarity model.

In contrast to previous iterations of the model upon which the theory of family solidarity is based (e.g., Bengtson & Roberts, 1991; Bengtson & Schrader, 1982; McChesney & Bengtson, 1988; Roberts & Bengtson, 1990), we tested an innovative model of family solidarity which

assessed aid given to and received from adult children and elderly parents' plans for care as outcome variables. We expected, through direct and indirect paths, that contact with adult children, the attachment that an older parent feels toward the focal child, filial responsibility expectations, and the size of the parent's family, parental poor health, and close proximity to the focal child would all positively affect the aid these parents would give to and receive from the focal child. In turn, above and beyond any intergenerational aid, we expected that all of these elements of family solidarity, including aid given and aid received, would increase the likelihood of an elderly parent expecting their children to help them, if needed, as opposed to other family members or service agencies.

Discussion

Our initial contention that the plans that older parents have for care, in the event of illness or infirmity, is a continuum of the aid they already give to or receive from their children is not supported; plans for care are not related to intergenerational exchanges of aid when other factors are controlled. There clearly seems to be a disjuncture between the actual behaviors of intergenerational aid-giving and the cognitive plans that older parents have for such assistance, if they should need it. Preexisting patterns of intergenerational exchanges of

aid do not increase the likelihood of older parents planning on help from their children, as suggested by Walker and Pratt (1991) and as we expected.

One feasible explanation for this finding concerns the effects of our research design. The questions regarding intergenerational aid were asked in terms of a focal child while responses to those involving older parents' plans for care could include any children (as well as other persons or entities) of the older parent. We purposefully focused our attention on the children who were most involved with their parents in order to maximize the amount of intergenerational aid exchanged by older parents, knowing that our estimates of aid exchanged on plans for care would be conservative. We reasoned that whichever child was most involved, currently, in an older parent's life would be the child that the parent would plan for care from in the future. However, our findings suggest that maximizing the amount of aid given and aid received by parents and their children, by using a focal child, does not influence plans for care. Certainly, as Roberts and Bengtson (1990) suggest, our decision to use a focal child rather than a randomly selected one reduced variation and covariation in the distributions of aid given and aid received; if we had used, as these authors suggest, a randomly selected child, we would increase our variation and covariation in intergenerational aid exchanges. While there may be a statistical reason for randomly selecting a

child, there does not seem to be a logical reason to us. Additionally, if aid given and aid received have no effects on plans for care at maximum levels of aid (via use of a focal child), it is not clear to us that using a randomly selected child would increase the likelihood of an older parent choosing a child over others in terms of plans for care.

Another possible interpretation for what may be occurring is that, for the sake of their own well-being, the older parents in this sample must necessarily separate their own intergenerational exchanges of aid from their plans for care. It may be a way for them to relieve their own cognitive dissonance between independence and dependence, between being a burden to their children or a viable support network for their children. Planning for care from children may be demoralizing to older parents and signal dependence to them, especially for elders who are coresiding with children.

Walker et al. (1990) suggest that older parents tend to view the aid that their children give to them as discretionary rather than obligatory. An analogous principle may apply to the aid these parents give to their children. Rather than an obligation to support children who cannot take care of themselves, older parents may view help they give to their children as given of their own free will and judgment. Perceiving intergenerational assistance as an

inclination may help parents reduce the cognitive dissonance associated with the costs of giving aid to or receiving aid from children. Similarly, with regard to plans for care and its connections (or lack thereof) to intergenerational aid, older parents may not be able to associate the aid they give to or receive from their children with their own plans for care because it is too costly for them in psychological terms.

However, this does not mean that elderly parents' plans for who will assist them are not important to family solidarity or do not contribute to the development of the theory of family solidarity. Rather than regarding plans for care as the final outcome of family solidarity, dependent on intergenerational exchanges of aid, it is perhaps more useful to view plans for care as an independent and distinct form of functional solidarity, which would also include aid given to and received from family members as separate constructs. We suggest that older parents' plans for care have important implications for elder care, both on a theoretical and a practical level, and they should not be dismissed. Several of our predictor variables are significantly related to plans for care, but not to the exchange forms of functional solidarity, while some variables are related only to intergenerational exchange of aid. These relationships can allow us to expand our thinking about intergenerational aid in later life families.

In spite of the lack of support for the main focus of our study, it appears that certain dimensions of family solidarity do, indeed, increase functional solidarity in later life families, as we suggested. The results of the path analytic methods used in this study show that contact with focal children (associational solidarity) and proximity to focal children (a part of structural solidarity) are the key factors in family solidarity.

Proximity to a focal child and contact with that child directly and indirectly influence all forms of functional solidarity, aid given to and received from focal children, as well older parents' plans for care. From this study, it appears that both frequent interactions with children and close proximity to children (not coresidency) directly increase the likelihood among older parents of planning on help from their children if they need it in later life. Associational solidarity also mediates between proximity and plans for care. Older parents who live closer to their children have more contact with them, which increases the likelihood of those parents planning on caregiving help from children; parents with less proximate children have lower levels of associational solidarity and, in turn, are more likely to plan for assistance from others, such as friends or neighbors, or from social agencies.

Older parents in this sample who have low levels of contact with a focal child and are less proximate to that

child are less likely to engage in intergenerational exchanges of aid. These effects are both direct and indirect; that is, proximity mediates the effects of associational solidarity on exchanges of aid. Thus, those older parents who live close to their children have higher levels of contact with them, which serves to increase the aid given to and received from adult children. These findings support evidence from previous research that suggests that contact is a precursor to assistance and coresidence for older parents (Prakasa & Rao, 1985; Spitze & Miner, 1992) and that proximity is the strongest predictor of frequency of interaction among family members (Lee, 1980; Lee et al., 1990).

While it may seem that less proximity and contact create serious barriers for older parents to the receipt of assistance from their children, we must keep in mind that this sample of elders was not particularly impaired. Hogan, Eggebeen, and Clogg (1993) find that, in times of need such as poor health, less proximate children will increase aid to their aging parents. This study lends support for that finding; even when proximity is controlled, parents in poor health receive more aid from children than parents in good health. The authors suggest that, increasingly, younger generations of Americans are becoming more proficient than older generations at using modern transportation and

communication methods which have reduced the effects of proximity on the receipt of family aid for older adults.

Associational solidarity is strongly and positively affected by its interrelated antecedent, proximity, as well as positively associated with poor parental health, felt affection for children, and whether the child is a daughter. These findings support other research that shows these are good predictors of contact (Roberts et al., 1991).

As with other research (Bengtson & Roberts, 1991), this study finds that normative solidarity does not directly predict contact. What may be occurring is the effect of proximity on both normative solidarity and associational solidarity. In this study, older parents who live in close proximity to their children have high levels of filial responsibility expectations and, as discussed earlier, high levels of contact with their children. In addition to examining the direct effect of normative solidarity on associational solidarity, we also tested whether proximity was indirectly related to associational solidarity through normative solidarity (see Table 11); we found no evidence of an indirect effect. However, there are strong noncausal effects on the relationship between normative solidarity and associational solidarity and these seem to be primarily from the strong association between proximity and normative solidarity (see Table 13). Thus, proximity affects both normative and associational solidarity, reducing or

eliminating the association between them. Other models of family solidarity (e.g. Bengtson & Roberts, 1991; Rossi & Rossi, 1990) do not account for the possibility that proximity may have a spurious affect on both normative solidarity and associational solidarity.

It is quite apparent from this study that proximity to and contact with children exert tremendous influences on family solidarity in later life families, though the findings with regard to proximity must be interpreted with caution due to the cross-sectional nature of our data. Nevertheless, we strongly suggest that future research cannot examine fully family solidarity or the exchange of family aid and plans for care without including both proximity of family members to each other and associational solidarity.

Among this sample of older parents, normative solidarity is the strongest predictor of plans for care. In this study, parents with high filial responsibility expectations are more likely to plan for help from children rather than from others, even when controls are introduced for proximity, affectional feelings, and other factors that might influence whether these parents actually receive such aid from their children. Thus, older parents who believe that adult children should provide assistance to elderly parents in general terms are, in fact, more likely to expect care from their own children. This may indicate that

universalistic norms of filial responsibility expectations and particularistic plans that elderly parents have for care from children are not entirely separate dimensions and that the particular (plans for care) is an outcome of the general (normative solidarity).

This finding is of special concern because our research here and other research (Lee et al., 1994b) has shown that parents who expect more help from their children do not necessarily receive it. If parents with high levels of normative solidarity are planning on receiving help from their children, if they should need it in the future, they are likely to be setting themselves up for disappointment. This group of elders may be particularly at risk for decreased psychological well-being, if they should find they have become too ill or infirm to care for themselves.

Indeed, other researchers (Kerckhoff, 1966; Lee et al., 1994c; Quinn, 1983; Seelbach & Sauer, 1977) have shown that elderly parents who have high filial responsibility expectations are more depressed than those who have low expectations. Indecision about the future, especially if combined with high expectations, may lead to decreased psychological well-being (Lee et al., 1994c). We also know that caregiving is not always a comfortable topic of discussion among family members, perhaps because of a desire on the part of elderly parents to not be a burden to their children (Blieszner & Mancini, 1987). Parents with high

filial responsibility expectations may need help in exploring alternatives to family care to enable them to feel more in control of their lives and to avoid a potential for depression.

This is not to say that children will neglect their aging parents; the results from this study indicate that parents in poor health have more contact with their children and do receive help from them. What seems to be occurring is that while universalistic expectations (normative solidarity) and particularistic expectations (plans for care) are associated, generalized expectations do not affect actual behaviors (aid received from children) and actual behaviors do not predict expectations in the particular (plans for care). What we do not know from this study is whether parents who have particularistic plans on receiving help from their children actually receive it. It may well be that expectations of any kind do not translate into concrete behaviors. Until that can be determined, the effects of expectations on behaviors remain unclear.

It is also clear that older parents' plans for care vary by the type and intensity of care. Here, we can see connections between informal and formal care. Many of the elders in this study selected children and children-in-law to talk to if lonely or for help getting to a doctor's office. However, as the severity of the caregiving activity increased, fewer older parents planned to use their children

for help and more expected help from formal support systems. For example, nearly two-thirds (61.3%) of the elderly parents would not ask a children for help with activities of daily living and one-third of those expected to use social agencies. A clear majority of these older parents (86.2%) did not plan to live with their children if they found they could no longer manage to live on their own; of those parents, 53.6% planned on living in a nursing home.

It is quite clear that large proportions of this elderly sample expect to use formal care if they become ill or infirm. As we have stated, older persons do not wish to be a burden to their children and want to maintain their independence as long as possible. Knowing that they expect more help from formal services will allow us to plan accordingly. For example, it is not altogether clear from this study which formal services older adults might prefer and to which groups of elders such services should be targeted. We suggest further research which would examine the importance of hospitals, rehabilitation and hospice care, senior centers, assisted living facilities, and community and home-based services (i.e., chore services, visiting nurses, home health aides) in the lives of older adults and would take into account heterogeneity and variation of elders in terms residential and geographical location and culture, as well as current distribution of

elder services and providers (National Institute of Nursing Research, 1994).

With regard to the effects of other dimensions in the family solidarity model on the exchange forms of functional solidarity, affectional solidarity and normative solidarity have no effects on the aid older parents give to or receive from their adult children. These findings do not support other research which suggests the importance of affect (Bengtson et al., 1985; Bengtson & Roberts, 1991; Roberts & Bengtson, 1990; Rossi & Rossi, 1990) and normative solidarity (Atkinson et al., 1986; Hanson & Sauer, 1985; Lee et al., 1994b) to intergenerational exchanges. This may be the result of measurement problems, particularly with our affectional solidarity scale. This issue will be discussed in the section on study limitations.

Apart from associational solidarity and proximity, intergenerational exchanges of aid with this sample of older parents seem to be more functions of the other structural solidarity factors, parental health and family size, and of such sociodemographic influences as gender, age, employment statuses of both parents and children, and income than of affectionate feelings for children or filial responsibility expectations. Each of these factors deserves special emphasis.

The theory of family solidarity proposes that good parental health is a structural opportunity for interaction.

We suggest that in later life families, poor parental health may also work as an "opportunity" for interaction. Our findings support this contention. Older parents in poor health receive more assistance from their children and are more likely to plan on help from children, if needed, than those in better health.

Family size also predicts the aid children receive from older parents and their plans for care. As we expected, elderly parents who have smaller families are able to give more to their children than their counterparts. This may come from competing loyalties (Aldous & Klein, 1991) toward children that older parents may feel if they have large numbers of children or from the more adequate family financial well-being usually found in smaller families (Rossi & Rossi, 1990). Older parents may feel they should give equal attention and assistance to all children, but find that if they have a large family this is much more difficult to accomplish in terms of energy and economics. We also expected that family size would be positively associated with older parents planning for help from children than from others and this hypothesis was supported. Having a large family seems to operate, on a cognitive level, as a resource for older parents in planning their own care. However, family size is not related to the aid older parents receive from the children. It may be that in larger

families, giving aid to an older parent is a shared responsibility among the children.

Elderly mothers are more likely to receive aid from their children. While aid received from focal children did not predict plans for care, from the evidence with regard to gender of the parent, there is at least some expectation that the largest groups of elders and those who need help the most, women, do receive such assistance from them. For the elderly women in this sample, as with the majority of community residing older adults in the U.S. (Sauer & Coward, 1985), informal caregiver networks may represent a major source of long-term support for them in the event of illness, physical decline, or frailty.

Stone et al. (1987) estimate with a nationally representative sample of caregivers to the elderly that daughters constitute the largest group of caregivers (29%). Interestingly, in this sample, focal daughters are no more likely to give aid to parents than are focal sons. Since adult children were not the focus of this study, there may be some characteristic of the focal daughters of the elders in this sample that was not disclosed with our questionnaire. Nevertheless, our findings have important implications for the caregiver, especially women, in terms of appropriate educational and support programs, such as information disbursement on caregiver supports available in the community and availability of respite care, financial

assistance to caregivers, or caregiver support groups (Abel, 1990). Making caregiving less of a "gendered" activity, through research, education, and individual and societal changes in gender attitudes and behaviors toward sexuality and the division of domestic labor in our society, may relieve some of the burden on women to provide such care and make caregiving more palatable to men (Fisher & Tronto, 1990; Fisher, 1990).

Additionally, in spite of their wishes, providing older adults exclusively with formal care may not be economically practical for the community in which they reside or for the nation. Educational and counseling efforts are needed to help older adults recognize that informal care can be a viable and benevolent alternative to formal services and to assist informal caregivers in understanding the importance of independence to older adults and their fear of burdening family members and other potential sources of help.

Employment status of both older parents and their children exert influences on parental plans for care and aid to children, though the findings must be interpreted with caution because of the cross-sectional nature of our data. Nonetheless, the finding casts an interesting and new insight on family solidarity and intergenerational exchanges of aid. Older parents who are employed full-time are more likely to plan for care from children than older parents who are not employed or are retired. These parents, who are

likely to be working because they cannot afford retirement, may not feel they have the resources to consider caregiving options other than their own family members. However, as with high filial responsibility expectations among older parents, being an employed elderly parent does not predict the aid received from children. These parents may also be vulnerable to not getting their caregiving needs met.

Older parents are more likely to give aid to focal children who are not employed than to employed focal children, indicating a willingness on the part of elderly parents to help out less fortunate adult children, if they are able to do so. The reciprocal relationship is not found, however. Employed focal children are no more likely to assist older parents than are unemployed focal children. This lends credence to earlier studies (Stoller, 1983; Stueve & O'Donnell, 1989; Boaz & Muller, 1992) which suggest that the effects of employment on informal parental caregiving is an issue of social and economic importance.

Adult children, especially women, may have many competing responsibilities placed on them--employment, parental caregiving, and caregiving for their own families, to name a few. The potential for conflict between paid work and family commitments is particularly high for this group (Stone et al., 1987; Stueve & O'Donnell, 1989) and may have negative effects on the adult child caregivers and the elderly parent care receivers (Anastas et al., 1990).

Adjusting employment by reducing hours of employment or by taking unpaid leave only seems to increase the emotional strain of caregiving (Stephens & Christianson, 1986).

Anastas et al. (1990) suggest that one strategy for dealing with potential for conflict between work and caregiving is by making adjustments in the work place. They recommend such employee assistance programs as information and referral about caregiving resources, flextime, job sharing, respite care, and on-site adult and child day care. Community supports for employed caregivers include medical and social services which accommodate the hours of work.

Parental age and income operate as expected with regard to intergenerational exchanges of aid. Parents who are younger and have higher incomes, probably because of their younger ages and increased likelihood of being employed, give more to focal children. Parents who are older and have lower incomes, precisely those elders who have higher needs, receive more aid from focal children.

Study Limitations and Recommendations for Future Research

As the theory of family solidarity has developed over the years, Bengtson and his colleagues (e.g. Bengtson & Roberts, 1991; Roberts et al., 1991) have argued that the structure of family solidarity needs to be better understood through more theory development and empirical verification. This study has been one such attempt at building on the

foundation that has been laid for the development of an explicit model of family solidarity.

While our proposed model did not perform entirely as expected, it, nonetheless, made theoretical and empirical contributions to the development of a more fully specified model of family solidarity. A theoretical rationale for the model not working is provided in the preceding section. We suggest research that would examine plans for care as a distinct element of functional solidarity, as well as an antecedent to the intergenerational exchanges of aid. In this section, we will deal with the methodological and more empirical problems of the study.

As with most research, this study has limitations. These weaknesses, however, can be used to make suggestions for future research and development of the theory and better specified models of family solidarity. We begin with some general comments.

First, we are fully aware that the data set used in this study is problematic and cannot be generalized to the larger population of older parents because of the low response rate and its non-random nature. However, it is still the best we have so far and it afforded us the opportunity to investigate this important question of the plans for care of older parents, as well as other issues related to family solidarity. Further studies are needed with representative and random samples of older parents in

order to elucidate further the place of plans for care in family solidarity.

In addition, while not the main focus of the study, we could not reveal much about race differences in family solidarity because our sample contained only nineteen nonwhite elderly parents. Certainly, research evidence exists that elements of family solidarity vary by race. Future research needs to account for these differences by assuring sufficient numbers of all race and ethnic groups.

Second, as originally proposed, the theory of family solidarity is an explanation for solidarity between generations (Atkinson et al., 1986; Roberts & Bengtson, 1990). We have few measures of the adult child generation and those we do have (e.g., focal child employment status, affectional solidarity) are based on proxy reports from the older parent generation. We have no measures of the grandchild generation. In order to examine family solidarity as completely as possible and to ensure the reliability and validity of the various measures of intergenerational solidarity (Mangen, 1988), data are needed from all generations.

Third, longitudinal analyses are clearly needed in order to determine how functional solidarity develops and evolves over time and to examine such factors as age for age, period, and cohort effects and proximity and child's employment status to determine their antecedents. Our

cross-sectional data could not reveal the dynamic nature of intergenerational exchanges of aid nor whether and how older parents' plans for care change over time as their familial circumstances and situations change or are affected by their early life experiences.

Walker and Pratt (1991) argue that the caregiving that older parents receive is a continuation of preexisting patterns of familial aid-giving. We extended their logic to include older parents' plans for care as the final outcome variable. However, as these authors suggest, we can draw no conclusions about how the transition from intergenerational exchanges of aid to parental caregiving occurs without longitudinal data nor can we determine whether older parents' plans for care are truly a continuum of care that is established early on in a family's history. It may well be that intergenerational exchanges of aid do determine who an elder will plan for help from, but because we are only looking at these variables at one random point in time, we may be missing important connections in family solidarity or likely are measuring exchanges and plans for care when time of need is low.

We also emphasize the importance of family history in determining family solidarity. We alluded to this many times throughout this study, however, because we had no measures of family history, we could only speculate about its effects on family behaviors and family solidarity. From

this study, as well as others (e.g., Rossi & Rossi, 1990; Whitbeck et al., 1994), it appears that sentiment does determine behavior in families. However, unlike Rossi and Rossi (1990) and Whitbeck et al. (1994) we could not ascertain if early family relationships had long-term consequences on the provision of support in our sample of later life families. The quality and cohesion of early family life, the transmission of skills, and whether the family is intact or broken (Rossi & Rossi, 1990; Whitbeck et al., 1991), are all factors that future research in the area of intergenerational relations needs to attend to before we have a full understanding of family solidarity. Family systems evolve out of their own history and, in the present, early family history influences interactions and behaviors. This dynamic system has considerable significance in the ability of family members to provide support to each other, especially for some of the most vulnerable members, elderly parents.

More specific comments on the limitations of this study have to do with measurement and statistical analyses. As mentioned in the previous section, contrary to previous research which indicates that affectional solidarity is an important component of family solidarity, in our model, our hypotheses about the effects of affectional solidarity on the three forms of functional solidarity were not supported, though, as expected affectional solidarity did predict

associational solidarity. We used the reliability- and validity-tested measures, in their exact form, which have been developed by Bengtson and colleagues (Gronvold, 1988). However, our scale did not behave as the previous research would suggest. This is most likely due to the lack of variance that our measure produced and, as a result, we probably do not have good estimates of the true effects of affectional solidarity on other dimensions of family solidarity.

Recall that the distribution of our scale was extremely negatively skewed. The parents in our sample reported high levels of affection and closeness in their relations with their children and very little animosity toward their children to the telephone interviewers. We are unclear, however, as to whether this situation is attributable to the reality of these elders' relations with their children or to a reluctance on the part of this particular group of older parents to speak badly of their relations with their children. The most likely explanation, however, has to do with our selection of a focal child. This is the child who helps the older parent the most or who has the most contact with the older parent. Presumably, older parents would be reluctant to criticize or denigrate someone who is willing to help them or would not have much contact with someone they did not like.

Nonetheless, this raises an interesting issue with regard to the antecedents to affectional solidarity. Whitbeck et al. (1994) suggest that early family experiences can strain affectional solidarity and relationships later on between adult children and their older parents, in turn, adversely affecting the aid that adult children might give to elderly parents. These authors found that early parental rejection (in terms of trust, fault, care, and blame) reduced the degree to which adult children felt concern or responsibility for their older parent's well-being and decreased affectional solidarity for and aid given to elderly parents. Thus, it may be that family histories or longitudinal analyses that reveal past conflictual relations that existing measures of current positive sentiment toward other family members do not capture. We suggest that more rigorous theoretical development and measurement analysis of affectional solidarity is needed with regard to this dimension of family solidarity.

Related to the discussion of measurement is the issue of statistical analyses. Because our concerns in this study were with the structural components or relations between the dimensions of family solidarity, we viewed path analysis as the most appropriate statistical analysis. However, because of the preceding discussion, it is clear that measurement needed to be addressed. This study would have benefitted from the use of statistical analyses, such as linear

structural equation models or LISREL which can take measurement properties of theoretical models into account.

Because LISREL, unlike path analysis, can manage multiple indicators of variables, recognizes that measures in the social sciences are imperfect, and has the ability to estimate how well data fit both the structural equation model and the measurement model, it is a much more powerful and flexible statistical technique than path analysis (Bentler, 1980; Pedhazur, 1982). Additionally, future research in the area of family solidarity should examine the possibility of interactions. It may be that some variables in the model, such as income or affectional solidarity have different effects for women than for men, for example (see Mangen, 1988, for suggestions on other statistical techniques appropriate for examining family solidarity).

Conclusion

This research has addressed theoretical and methodological issues related to the study of family solidarity and our understanding of later life family relations. Without a doubt, the continued existence of the social group called "the family" over time points out the strength of this social institution. Though our conceptualizations of families are changing and dynamic, especially in recent years, kin ties, particularly the parent-child relationship, are strong and exert enormous

influences over us throughout the life course (Rossi & Rossi, 1990). Understanding the nature of these ties which bind family members together into coherent collectivities can help us understand why they exist in the first place. Indeed, we have argued throughout this research that a key to understanding the existence of families is in understanding the interdependence of family members through the giving and receiving of intergenerational aid.

Durkheim (1893/1984) writes of whole "systems of images" which unite to make solidarity and group life possible. In family groups, as well as other groups, these images are made up of beliefs, attitudes, and, ultimately, behaviors. Family images include filial responsibility expectations, affection, and association between family members, the intergenerational exchanges of aid, and the plans that family members have for who will assist them if they should need it. These images coalesce and work together to form family solidarity. This study afforded us the opportunity to examine such concepts. Indeed, as Rossi and Rossi (1990) have argued, sentiments do seem to drive behaviors in families. Certain images create more family solidarity (i.e., proximity and contact), while others seem to have no effects (i.e., gender of children or norms of filial responsibility on intergenerational exchanges of aid).

Beyond these theoretical concerns, however, variation in family solidarity can have effects on the social, economic, and psychological well-being of those involved in family relationships (Roberts et al., 1991). Thus, in this final section, we must ask about the practical implications of family solidarity. This study has pointed out certain elderly parents who are open to not getting their caregiving needs met or who may plan on help from their children, but not receive it. Older parents with high levels of normative solidarity, who are employed full-time, who have smaller families and employed adult children, and who have less contact with their children may be particularly vulnerable to decreased quality of life and well-being.

Roberts et al. (1991) point out that the link between dimensions of family solidarity and well-being is an area that is, as yet, underdeveloped. Some research suggests that intergenerational support increases psychological well-being in older parents (Roberts et al., 1991), while other studies report a reduction in psychological well-being with increased levels of intergenerational exchanges of aid, reflecting a loss of independence in old age (Lee et al., 1994c). This is an area of family solidarity that clearly needs attention.

A final issue that can be related to the findings from this study has to do with whether adult children have ethical and moral obligations to assist frail elderly

parents. The duties of adult children toward their parents, generated by past parental sacrifices for them, is a hotly debated topic (Wicclair, 1990). Public policy makers see family care as a way to manage increased health needs of expanding elderly populations and decreased resources (Fischer & Hoffman, 1984). Others see these "appeals" to filial obligations as leaving women the ultimate losers in the "assignment" of the caregiving role on them with neither their consent nor a consideration of their needs (Post, 1990).

While children are willing to help their older parents and filial obligations tend to be higher among younger generations than among older generations (Hamon & Blieszner, 1990), competing work and family responsibilities, poor intergenerational relations, lack of support systems, and situations which leave older parents and their children living great distances from each other make it difficult for adult children to fulfill all their obligations. On the other side of the issue is the question of whether older parents actually want help from their children. This study shows, as has previous research, that elderly parents may be ambivalent about help from family members. We must strike a balance between the expectations and desires of adult children toward parental care, the wishes and plans that elderly parents have for informal and formal assistance, and

the abilities of formal health and social services to provide assistance to older adults and their family members.

As Bengtson et al. (1988) suggest, each dimension of family solidarity examined in this study points out the fundamentally unique aspects of each on family solidarity. Family solidarity cannot and should not be viewed as a higher order construct; systematic efforts to develop "grand theories" (Merton, 1967) of family solidarity which would seek to unify all observed commonalities of family behavior under one all-encompassing explanation are not appropriate (Bengtson & Mangen, 1988).

Bengtson and Mangen (1988) call for the development of middle-range theories of solidarity, theories which are less abstract, more grounded in the real world of lived experience, and more empirically based than grand theory (Merton, 1967). It is evident from this study and others that family solidarity is composed of many aspects, such as association, norms, and behaviors, which interact with each other in different ways. Middle-range theories would address the causes and consequences of each aspect of family solidarity, as well as relationships among the various dimensions. They would point out the unique determinants of each dimension of solidarity that is analyzed.

Middle-range theory can also inform grand theories of solidarity, in general. For example, one issue that was not explicitly addressed in this study, nor in other research

with the theory of family solidarity, is how individual self-interest might generate family solidarity. Does family solidarity arise out of altruism or out of the self-interest of the individual members? There is no doubt that family members are primary providers of help to each other. What is less clear is the role of reciprocity in families; is it simply a moral and obligatory norm; what would enforce such a norm; when do family exchanges become out of balance and what are the consequences of that on family solidarity? These are questions that still require answers before we understand fully the dynamics of family solidarity. This study is only one attempt at developing and refining a structural theory of family solidarity through empirical testing. Much more is needed before the state of knowledge about family solidarity in later life families is advanced.

APPENDIX
KANSAS ELDERLY TELEPHONE STUDY

ID NUMBER _____

DATE: _____

TIME BEGAN: _____

INTERVIEWER: RECORD SEX

- 1 Male
- 2 Female

MAIN QUESTIONNAIRE
PART ONE: FILIAL OBLIGATION AND GENDER ROLES

I'D LIKE TO BEGIN WITH QUESTIONS ABOUT HOW YOU FEEL PARENTS AND THEIR ADULT CHILDREN SHOULD BEHAVE TOWARD EACH OTHER. I'M NOT ASKING YOU ABOUT YOU AND YOUR CHILDREN, BUT RATHER ABOUT HOW YOU FEEL PARENTS AND THEIR ADULT CHILDREN SHOULD RELATE TO EACH OTHER.

PLEASE TELL ME WHETHER YOU STRONGLY AGREE, AGREE, DISAGREE, OR STRONGLY DISAGREE WITH EACH OF THE FOLLOWING STATEMENTS.

1. As many activities as possible should be shared by grown children and their parents.
 - 1 SA
 - 2 A
 - 3 D
 - 4 SD
 - 99 DK/Refused
2. If children live nearby after they grow up, they should visit their parents at least once a week.
 - 1 SA
 - 2 A
 - 3 D
 - 4 SD
 - 99 DK/Refused

3. Grown married children should live close to their parents so that they can help each other.
- 1 SA
 - 2 A
 - 3 D
 - 4 SD
 - 99 DK/Refused
4. A family should be willing to sacrifice some of the things they want for their children in order to help support their aging parents.
- 1 SA
 - 2 A
 - 3 D
 - 4 SD
 - 99 DK/Refused
5. Older people should be able to depend upon their grown children to help them do the things they need to do.
- 1 SA
 - 2 A
 - 3 D
 - 4 SD
 - 99 DK/Refused
6. Parents are entitled to some return for the sacrifices they have made for their children.
- 1 SA
 - 2 A
 - 3 D
 - 4 SD
 - 99 DK/Refused
7. If an old man has a medical bill of \$1,000 that he cannot pay, his son or daughter is morally obligated to pay the debt.
- 1 SA
 - 2 A
 - 3 D
 - 4 SD
 - 99 DK/Refused
8. It is a good idea for elderly parents and their adult children to live together.
- 1 SA
 - 2 A
 - 3 D
 - 4 SD
 - 99 DK/Refused

9. An adult child should be responsible for the care of her/his mother or father when they become too old to care for themselves.

1 SA
2 A
3 D
4 SD
99 DK/Refused

NOW I'D LIKE TO READ YOU A SERIES OF STATEMENTS. AGAIN, PLEASE TELL US WHETHER YOU STRONGLY AGREE, AGREE, DISAGREE, OR STRONGLY DISAGREE WITH EACH OF THE FOLLOWING STATEMENTS. THERE ARE NO RIGHT OR WRONG ANSWERS TO THESE STATEMENTS. WE ARE SIMPLY INTERESTED IN YOUR OPINION.

10. A married woman's most important task in life should be taking care of her husband.

1 SA
2 A
3 D
4 SD
99 DK/Refused

11. A working wife should give up her job whenever it inconveniences her husband.

1 SA
2 A
3 D
4 SD
99 DK/Refused

12. A wife should be able to make long-range plans for her occupation, in the same way that her husband does for his.

1 SA
2 A
3 D
4 SD
99 DK/Refused

13. If his wife works, a husband should share equally in household chores such as cooking, cleaning, and washing.

1 SA
2 A
3 D
4 SD
99 DK/Refused

14. A married man's chief responsibility should be his job.
 1 SA
 2 A
 3 D
 4 SD
 99 DK/Refused
15. The husband should be the head of the family.
 1 SA
 2 A
 3 D
 4 SD
 99 DK/Refused

PART TWO: FAMILY RELATIONS

NOW I'D LIKE TO ASK YOU A FEW QUESTIONS ABOUT YOUR FAMILY.

1. How many living children do you have? Please count all biological, step- , and adopted children?

_____ sons

_____ daughters

_____ (ENTER "1" IF NO CHILDREN, OTHERWISE ENTER "88")

2. Who else lives in your household besides yourself? Please tell us how many of each of the following kinds of people lives with you. (READ LIST) (DK/REFUSED = 99)

_____ NO ONE (ENTER "1" IF NO ONE AND SKIP TO NEXT QUESTION. OTHERWISE ENTER "88" AND CONTINUE WITH LIST)

_____ HUSBAND OR WIFE

_____ DAUGHTERS

_____ SONS

_____ SISTERS

_____ BROTHERS

_____ GRANDCHILDREN

_____ PARENTS OR PARENTS-IN-LAW

_____ OTHER RELATIVES

_____ PEOPLE TO WHOM YOU ARE NOT RELATED

PART THREE: NEED FOR ASSISTANCE

NOW I'M GOING TO READ YOU A LIST OF ACTIVITIES THAT SOME PEOPLE NEED HELP TO DO. FOR EACH ACTIVITY, PLEASE TELL ME WHETHER YOU NEED ANY ASSISTANCE IN DOING IT AT THE PRESENT TIME, AND IF SO WHO USUALLY HELPS YOU DO IT. (FOR THE FOLLOWING QUESTIONS USE THE CODES LISTED BELOW).

CODING SCHEME:

00 NO HELP NEEDED
 01 HUSBAND OR WIFE
 11 OLDEST SON
 12 SECOND OLDEST SON
 .. ETC.
 21 OLDEST DAUGHTER
 22 SECOND OLDEST DAUGHTER
 .. ETC.
 39 ANOTHER RELATIVE
 49 NEIGHBOR
 59 ANOTHER FRIEND
 69 PROFESSIONAL OR PAID ASSISTANT
 79 NEED HELP BUT NO ONE PROVIDES IT
 99 DK/REFUSED

1. _____ Eating
2. _____ Getting into or out of bed
3. _____ Moving around inside the house
4. _____ Dressing
5. _____ Bathing
6. _____ Using the toilet
7. _____ The household tasks you would normally do
8. _____ Laundry
9. _____ Cooking or preparing meals
10. _____ Shopping
11. _____ Transportation
12. _____ Managing money
13. _____ Yard work
14. _____ Household repairs
15. _____ Taking medication

INTERVIEWER: HAS RESPONDENT NAMED ANY CHILD(REN) AS
HELPER(S)?

- _____ Yes (Proceed to next question)
- _____ No (Skip to Q. 17)
- _____ Respondent has no children or refuses to
respond (Skip to Q. 44, PART III)

INTERVIEWER: HAS RESPONDENT NAMED MORE THAN ONE CHILD AS
HELPER?

- _____ Yes (Proceed to Q. 16)
- _____ No: CHILD NAMED IS: _____ (Skip to Q. 17)
(USE CODES FROM QUESTIONS 1-15 ABOVE)

16. Of the children you've named as helpers, which one
would you say helps you the most?

_____ (USE CODE FROM QUESTIONS 1-15)

17. Of all of your children, which one do you see most
often?

_____ (USE CODE FROM QUESTIONS 1-15) (Enter code
even if only 1 child: e.g., 11 [son] or 21
[daughter])

REFER TO BOX BELOW: IF ANSWER IN LINE "A" (MAIN
HELPER) DOES NOT EQUAL 88 OR 99, PLEASE ENTER THAT
CHILD CODE NUMBER BELOW. OTHERWISE, PLEASE ENTER CHILD
CODE NUMBER GIVEN IN LINE "B" (CHILD SEE MOST OFTEN)

- A. MAIN HELPER IS:
- B. CHILD SEE MOST OFTEN IS:

ENTER CHILD CODE HERE: _____
THIS CHILD WILL BE USED TO ANSWER THE FOLLOWING
QUESTIONS (QUESTIONS 18-43).

18. Now I'd like to ask you some questions about the child (who helps you the most [IF CHILD NAMED AS HELPER])/(you see most often). How far away from you does this child live? Does he/she live:
- 0 In same household
 - 1 Less than a mile
 - 2 One to five miles
 - 3 Between five and ten miles
 - 4 Between ten and fifty miles
 - 5 Between fifty and one-hundred miles
 - 6 Between one-hundred and five-hundred miles
 - 7 More than five-hundred miles
 - 99 DK/Refused

WITH THIS CHILD, HOW OFTEN DO YOU DO THE FOLLOWING?:

19. See or visit with this child?
- 1 At least once a day
 - 2 Several times a week
 - 3 Once a week or so
 - 4 Several times a month
 - 5 Once a month or so
 - 6 Several times a year
 - 7 Once a year or less
 - 99 DK/Refused
20. Get together at small family gatherings for special occasions like birthdays or anniversaries?
- 1 At least once a day
 - 2 Several times a week
 - 3 Once a week or so
 - 4 Several times a month
 - 5 Once a month or so
 - 6 Several times a year
 - 7 Once a year or less
 - 99 DK/Refused
21. Talk over things that are important to you?
- 1 At least once a day
 - 2 Several times a week
 - 3 Once a week or so
 - 4 Several times a month
 - 5 Once a month or so
 - 6 Several times a year
 - 7 Once a year or less
 - 99 DK/Refused

22. Telephone each other?
1 At least once a day
2 Several times a week
3 Once a week or so
4 Several times a month
5 Once a month or so
6 Several times a year
7 Once a year or less
99 DK/Refused
23. In what year was this child born? _____
(DK/REFUSED = 9999)
24. What is this child's current marital status?
1 Never-married
2 Married
3 Divorced
4 Widowed
5 DK/Refused
25. What is this child's current employment status? Is she/he:
1 Employed full-time
2 Employed part-time
3 A full-time homemaker
4 Retired
5 Unemployed and looking for work
6 Unemployed and not looking for work
99 DK/Refused
26. How many children does this child have? _____
(DK/REFUSED = 99)
27. How well do you understand this child? Would you say:
1 Not well at all
2 Not very well
3 Fairly well
4 Very well
99 DK/Refused
28. How much do you trust this child? Would you say:
1 Not much at all
2 Not very much
3 Quite a bit
4 Very much
99 DK/Refused

29. How fair do you feel you are toward this child? Would you say:
- 1 Not fair at all
 - 2 Not very fair
 - 3 Somewhat fair
 - 4 Very fair
 - 99 DK/Refused
30. How much do you respect this child? Would you say:
- 1 Not much at all
 - 2 Not very much
 - 3 Quite a bit
 - 4 Very much
 - 99 DK/Refused
31. How much affection do you feel for this child? Would you say:
- 1 Not much at all
 - 2 Not very much
 - 3 Quite a bit
 - 4 Very much
 - 99 DK/Refused
32. How well do you feel your child understands you? Would you say:
- 1 Not well at all
 - 2 Not very well
 - 3 Fairly well
 - 4 Very well
 - 99 DK/Refused
33. How well do you feel your child trusts you? Would you say:
- 1 Not much at all
 - 2 Not very much
 - 3 Quite a bit
 - 4 Very much
 - 99 DK/Refused
34. How fair do you feel your child is toward you? Would you say:
- 1 Not fair at all
 - 2 Not very fair
 - 3 Somewhat fair
 - 4 Very fair
 - 99 DK/Refused

35. How much respect do you feel from your child? Would you say:
- 1 Not much at all
 - 2 Not very much
 - 3 Quite a bit
 - 4 Very much
 - 99 DK/Refused
36. How much affection do you feel your child has for you? Would you say:
- 1 Not much at all
 - 2 Not very much
 - 3 Quite a bit
 - 4 Very much
 - 99 DK/Refused
37. How well do you and this child get along? Would you say:
- 1 Not well at all
 - 2 Not very well
 - 3 Fairly well
 - 4 Very well
 - 99 DK/Refused
38. Taking everything into consideration, how close do you feel is the relationship between you and your child? Would you say:
- 1 Not close at all
 - 2 Somewhat close
 - 3 Fairly close
 - 4 Very close
 - 99 DK/Refused
39. How is communication between yourself and your child? That is, how well can you exchange ideas and talk about things that really concern you? Would you say:
- 1 Not well at all
 - 2 Not very well
 - 3 Fairly well
 - 4 Very well
 - 99 DK/Refused

40. How much of the time do you and this child agree on religious views? Is there:
- 1 No agreement
 - 2 Little agreement
 - 3 Some agreement
 - 4 A lot of agreement
 - 5 Total agreement
 - 99 DK/Refused
41. How much of the time do you and this child agree on political views? Is there:
- 1 No agreement
 - 2 Little agreement
 - 3 Some agreement
 - 4 A lot of agreement
 - 5 Total agreement
 - 99 DK/Refused
42. Children sometimes help their parents with different things. Please tell me if you have received help with any of the following activities from this child in the past month:
- a. Advice on a decision you had to make
 - 99 DK/Refused
 - 1 Yes
 - 0 No
 - b. Financial assistance, such as a gift or loan
 - 99 DK/Refused
 - 1 Yes
 - 0 No
 - c. Gifts other than money
 - 99 DK/Refused
 - 1 Yes
 - 0 No
 - d. Help with some household task or chore
 - 99 DK/Refused
 - 1 Yes
 - 0 No
 - e. Help with transportation
 - 99 DK/Refused
 - 1 Yes
 - 0 No

43. Parents sometimes help their children with the same kinds of tasks. Please tell me whether you have given help to this child with any of the following activities during the past month.

- a. Advice on a decision he/she had to make
 - 99 DK/Refused
 - 1 Yes
 - 0 No
- b. Financial assistance, such as a gift or loan
 - 99 DK/Refused
 - 1 Yes
 - 0 No
- c. Gifts other than money
 - 99 DK/Refused
 - 1 Yes
 - 0 No
- d. Help with some household task or chore
 - 99 DK/Refused
 - 1 Yes
 - 0 No
- e. Help with babysitting or child care
 - 99 DK/Refused
 - 1 Yes
 - 0 No
- f. Help with transportation
 - 99 DK/Refused
 - 1 Yes
 - 0 No

44. Now, I'd like to know about your friends, including neighbors and other friends. In the past month, how often have you visited with any of your friends in either your home or their homes? (READ LIST)
- 0 Never
 - 1 Once or twice
 - 2 Two or three times
 - 3 Four or five times
 - 4 More than five times
 - 99 DK/Refused (DON'T READ)

45. In the past month, about how often have you gone out to do things with friends, like going to a movie or out to dinner?

0 Never
 1 Once or twice
 2 Two or three times
 3 Four or five times
 4 More than five times
 99 DK/Refused (DON'T READ)

46. Now, please think of the one person, who is not a relative, whom you consider to be your best friend. In the past month, how often have you seen or visited with this person?

0 Never (OR RESPONDENT HAS NO BEST FRIEND)
 1 Once or twice
 2 Two or three times
 3 Four or five times
 4 More than five times
 99 DK/Refused (DON'T READ)

47. From time to time, all of us are faced with situations where we might need help. I will read some of these situations to you. For each one, please tell me who, if anyone, you would be most likely to turn to if you were in that situation.

Let's start with an instance where (READ FIRST SITUATION)--who, if anyone, would you turn to or call? (CONTINUE THROUGH LIST. IF RESPONDENT SAYS WIFE/HUSBAND, ASK: Suppose your wife/husband were not available, who would you turn to?)

- a. You felt lonely and wanted to talk...

1 A son (#__)
 2 A daughter (#__)
 3 My self
 4 Son-in-law
 5 Daughter-in-law
 6 Another relative
 7 A friend
 8 A neighbor
 9 A social agency
 10 Other
 99 Don't know/refused

- b. You needed someone to help you get to the doctor's...

1 A son (#__)
 2 A daughter (#__)
 3 My self
 4 Son-in-law
 5 Daughter-in-law
 6 Another relative
 7 A friend
 8 A neighbor
 9 A social agency
 10 Other
 99 Don't know/refused

- c. If you found you do not have enough money to cover a very big medical bill...

1 A son (#__)
 2 A daughter (#__)
 3 My self
 4 Son-in-law
 5 Daughter-in-law
 6 Another relative
 7 A friend
 8 A neighbor
 9 A social agency
 10 Other
 99 Don't know/refused

- d. If you become seriously ill or disabled and found that you needed help with such things as getting into or out of bed, dressing yourself, moving around your home, or using the toilet...

1 A son (#__)
 2 A daughter (#__)
 3 My self
 4 Son-in-law
 5 Daughter-in-law
 6 Another relative
 7 A friend
 8 A neighbor
 9 A social agency
 10 Other
 99 Don't know/refused

- e. If because of failing health you found you could no longer live on your own, and must make other arrangements. Would you live with...

1 A son (#__)
 2 A daughter (#__)
 3 My self
 4 Son-in-law
 5 Daughter-in-law
 6 Another relative
 7 A friend
 8 A neighbor
 9 A nursing home
 10 Other
 99 Don't know/refused

48. Now, I'd like to ask a few questions about how you've been feeling these days. Compared to other people your own age, would you say your health is excellent, good, fair, or poor?

1 Excellent
 2 Good
 3 Fair
 4 Poor
 99 DK/Refused

49. Now please think of the way you've felt during the past week. Was there any time during the past week that you felt:

- a. Depressed?

99 DK/Refused
 1 Yes
 0 No

- b. Bothered by things that don't usually bother you?

99 DK/Refused
 1 Yes
 0 No

- c. Fearful?

99 DK/Refused
 1 Yes
 0 No

- d. Lonely?

99 DK/Refused
 1 Yes
 0 No

- e. Sad?
99 DK/Refused
1 Yes
0 No
- f. Like you couldn't shake off the blues?
99 DK/Refused
1 Yes
0 No
- g. Like you had lost your appetite?
99 DK/Refused
1 Yes
0 No
- h. That you had trouble concentrating?
99 DK/Refused
1 Yes
0 No
- i. Like everything was an effort?
99 DK/Refused
1 Yes
0 No
- j. Like you couldn't sleep?
99 DK/Refused
1 Yes
0 No
- k. Like you didn't want to talk to anyone?
99 DK/Refused
1 Yes
0 No
- l. Like you just couldn't get going?
99 DK/Refused
1 Yes
0 No

PART FOUR: DEMOGRAPHIC/PERSONAL

FINALLY, I'D LIKE TO ASK YOU A FEW THINGS ABOUT YOURSELF, TO HELP US ANALYZE THE INFORMATION WE'VE RECEIVED.

1. To what racial or ethnic group do you belong? Are you:
 - 1 Caucasian or white
 - 2 African-American or black
 - 3 Asian-American
 - 4 Native-American or American Indian
 - 5 Hispanic-American
 - 6 Other
 - 99 DK/Refused
2. In what year were you born? _____
(DK/REFUSED = 9999)
3. Which of the following best describes the place in which you live?
 - 1 On a farm
(SKIP TO Q. 5)
 - 2 In open country, but not on a farm
(SKIP TO Q. 5)
 - 3 In a town of less than 1,000 population
(ASK Q. 4)
 - 4 In a town of 1,001 to 10,000 population
(ASK Q. 4)
 - 5 In a town of 10,001 to 50,000 population
(ASK Q. 4)
 - 6 In a city of 50,001 to 100,000 population
(ASK Q. 4)
 - 7 In a city of more than 100,000 population
(ASK Q. 4)
 - 99 DK/Refused
(SKIP TO Q. 5)
4. Is this a suburb of a larger city?
 - 99 DK/Refused
 - 1 Yes
 - 0 No
5. How long have you lived in the county in which you now live? _____ years (DK/REFUSED = 999) (IF RESPONDENT LIVED THERE ALL HIS/HER LIFE, SKIP TO QUESTION 10)

6. In what kind of place did you live just before you moved to the county in which you now live?
- 0 Always lived in this county
(SKIP TO Q. 10)
 - 1 On a farm
(SKIP TO Q. 8)
 - 2 In open country, but not on a farm
(SKIP TO Q. 8)
 - 3 In a town of less than 1,000 population
(ASK Q. 7)
 - 4 In a town of 1,001 to 10,000 population
(ASK Q. 7)
 - 5 In a town of 10,001 to 50,000 population
(ASK Q. 7)
 - 6 In a city of 50,001 to 100,000 population
(ASK Q. 7)
 - 7 In a city of more than 100,000 population
(ASK Q. 7)
 - 99 DK/Refused
(SKIP TO Q. 8)
7. Was this a suburb of a larger city?
- 99 DK/Refused
 - 1 Yes
 - 0 No
8. What kind of a place did you live in most of the time while you were growing up?
- 1 On a farm
(SKIP TO Q. 10)
 - 2 In open country, but not on a farm
(SKIP TO Q. 10)
 - 3 In a town of less than 1,000 population
(ASK Q. 9)
 - 4 In a town of 1,001 to 10,000 population
(ASK Q. 9)
 - 5 In a town of 10,001 to 50,000 population
(ASK Q. 9)
 - 6 In a city of 50,001 to 100,000 population
(ASK Q. 9)
 - 7 In a city of more than 100,000 population
(ASK Q. 9)
 - 99 DK/Refused
(SKIP TO Q. 10)

9. Was this a suburb of a larger city?
99 DK/Refused
1 Yes
0 No
10. What is your current marital status?
1 Never-married (SKIP TO Q. 19)
2 Married (ASK Q. 11)
3 Divorced (SKIP TO Q. 18)
4 Widowed (SKIP TO Q. 18)
99 DK/Refused (SKIP TO Q. 19)
11. (IF MARRIED:) Is this your first marriage?
1 Yes
2 No
99 DK/Refused
12. For how many years have you been married (to your current spouse)?
_____ years (DK/REFUSED = 999)
13. What is your spouse's current employment status? Is he/she:
1 Employed full-time
2 Employed part-time
3 A full-time homemaker
4 Unemployed and looking for work
5 Unemployed and not looking for work
6 Retired (ASK Q. 13A)
99 DK/Refused
- 13a. For how many years has he/she been retired? -
_____ years (DK/Refused = 999)
14. How would you describe your spouse's health? Compared to other people of his/her age, would you say his/her health is?
1 Excellent
2 Good
3 Fair
4 Poor
99 DK/Refused

15. How satisfied are you with your marriage? Would you say you are:
- 1 Extremely dissatisfied
 - 2 Very dissatisfied
 - 3 Somewhat dissatisfied
 - 4 Mixed
 - 5 Somewhat satisfied
 - 6 Very satisfied
 - 7 Extremely satisfied
 - 99 DK/Refused
16. How satisfied are you with your (husband/wife) as a spouse? Would you say you are:
- 1 Extremely dissatisfied
 - 2 Very dissatisfied
 - 3 Somewhat dissatisfied
 - 4 Mixed
 - 5 Somewhat satisfied
 - 6 Very satisfied
 - 7 Extremely satisfied
 - 99 DK/Refused
17. How satisfied are you with your relationship with your (husband/wife)? Would you say you are: (ASK AND SKIP TO Q. 20)
- 1 Extremely dissatisfied
 - 2 Very dissatisfied
 - 3 Somewhat dissatisfied
 - 4 Mixed
 - 5 Somewhat satisfied
 - 6 Very satisfied
 - 7 Extremely satisfied
 - 99 DK/Refused
18. For how many years have you been (divorced/widowed)?
_____ years (DK/Refused = 999)
19. What is your current employment status? Are you:
- 1 Employed full-time
 - 2 Employed part-time
 - 3 A full-time homemaker
 - 4 Unemployed and looking for work
 - 5 Unemployed and not looking for work
 - 6 Retired (ASK Q. 19A)
 - 99 DK/Refused
- 19a. For how many years have you been retired? _____
years (DK/Refused = 999)

20. How many years of formal education have you had? _____
years
(INCLUDE YEARS OF BUSINESS OR TRADE SCHOOL BEYOND HIGH SCHOOL. HIGH SCHOOL OR GED = 12; SOME COLLEGE/VOCATIONAL TRAINING = 13; ASSOCIATES DEGREE = 14; BACHELOR = 16; MASTER'S DEGREE = 18; DOCTORATE = 20; DK/REFUSED = 99)
21. For purposes of analysis, we need to know about how much income you (and your spouse) had last year. Please tell us the letter of the category I'll read you that includes your income from last year.
- 1. Less than \$5,000
 - 2. \$5,001 to \$10,000
 - 3. \$10,001 to \$15,000
 - 4. \$15,001 to \$20,000
 - 5. \$20,001 to \$30,000
 - 6. \$30,001 to \$40,000
 - 7. \$40,001 to \$50,000
 - 8. \$50,001 to \$75,000
 - 9. \$75,001 to \$100,000
 - 10. More than \$100,000
 - 99. DK/Refused
22. How frequently do you attend church or synagogue services? (READ LIST)
- 0 Never
 - 1 Once or twice a year
 - 2 Several times a year
 - 3 Once or twice a month
 - 4 About once a week
 - 6 Several times a week
 - 99 DK/Refused (DON'T READ)
23. For verification purposes only, can I please have your name and phone number.

NAME

PHONE NUMBER _____

That's all the questions I have and thank you very much for participating.

TIME ENDED: _____
(TIME BEGAN WAS: _____)

LENGTH OF INTERVIEW: _____

INTERVIEWER: _____

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BIOGRAPHICAL SKETCH

Julie Netzer was born in Pasadena, California. She completed her early education in the California public school system. Upon her high school graduation, she joined the United States Women's Army Corps. When discharged from the military, she used her GI Bill benefit to begin her college career, first at the European branch of the University of Maryland in Ramstein, West Germany, and then at the University of Iowa. While at the University of Iowa, she majored in psychology with interests in sociology and the new field of social gerontology. Her GI Bill benefits ended before she could complete her undergraduate degree.


After moving to Florida, she worked in the pharmaceutical materials management field. She eventually returned to college after a thirteen-year absence. She completed her associate's degree at Valencia Community College in Orlando, Florida, graduating with honors. At the University of Central Florida in Orlando, she graduated cum laude with a bachelor's degree in psychology and a minor in sociology.

She immediately began her graduate career in the Sociology Department at the University of Florida. She concentrated her academic efforts on social gerontology and

a developing interest in family sociology, eventually choosing this field as her primary area of study. Her continued employment, as a graduate research assistant, first at the university's Center for Gerontological Studies and currently at the Institute for Health Policy Research gave her considerable research experience in such areas as later life families, rural and minority elders, health services for the elderly, and medical sociology. After completing her master's degree, she continued in the Sociology Department Ph.D. program at the University of Florida.

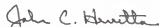
Upon completion of her Ph.D., she will begin a two-year postdoctoral fellowship at the Institute for Health Policy Research at the University of Florida. Her research, as a postdoctoral fellow, will concentrate on residential differences in the institutionalization rates of American elders, as well as long-term care and health services for rural elders and family relations. The fellowship is designed to provide her with the skills, experience, and background to pursue a career in health services research in a governmental or private research setting.

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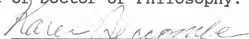
Gary R. Lee, Chairman
Professor of Sociology

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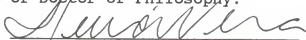
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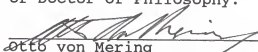
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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This dissertation was submitted to the Graduate Faculty of the Department of Sociology in the College of Liberal Arts and Sciences and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 1994

Dean, Graduate School